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Water Resources Data for Oregon

Volume 2. Western Oregon

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U.S. GEOLOGICAL SURVEY WATER-DATA REPORT OR-80-2

WATER YEAR 1980

Prepared in cooperation with the Oregon Water Resources Department and with other agencies

CALENDAR FOR WATER YEAR 1980

1979

OCTOBER

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Prepared in cooperation with the Oregon Water Resources Department and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

JAMES G. WATT, Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

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1981

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PREFACE

This report was prepared by the U.S. Geological Survey in cooperation with the State of Oregon and with other agencies by personnel of the Oregon district of Water Resources Division under the supervision of S. F. Kapustka, District Chief, and J. D. Bredehoeft, Regional Hydrologist, Western Region.

This report is one of a series issued State by State under the general direction of P. Cohen, Chief Hydrologist, and R. J. Dingman, Assistant Chief Hydrologist for Scientific Publications and Data Management.

Data for the State of Oregon are in two volumes as follows:

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Volume 2: Western Oregon

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Water Resources Data for the 1980 water year for Oregon consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality in wells and springs. This report, in two volumes, contains discharge records for 287 gaging stations; stage only records for 10 gaging stations; stage and contents for 41 lakes and reservoirs; water quality for 98 gaging stations, water levels for 68 observations wells; and water quality for 6 precipitation stations. Also included are 49 crest-stage partial-record stations. Additional water data were collected at various sites, not part of the systematic data collection program, and are published as miscellaneous measurements. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and co-operating State and Federal agencies in Oregon.

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b. Identifiers/Open-Ended Terms

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CONTENTS

	Page
Preface	III
List of surface-water stations, in downstream order, for which records are published	VII
Introduction	1
Cooperation	2
Hydrologic conditions	3
Definition of terms	8
Special networks and programs	16
Downstream order and station numbers	18
Explanation of surface-water records	18
Collection and computation of data	18
Accuracy of data	23
Other data available	23
Records of discharge collected by agencies other than the Geological Survey	24
Explanation of water-quality records	24
Collection and computation of data	24
Water analysis	24
Solutes	26
Water temperature	26
Sediment	26
Explanation of ground-water level records	27
Collection of data	27
Well descriptions	27
Water levels	28
Hydrographs	28
Well-numbering system	29
Publication on techniques of water-resources investigations	30
Gaging station records	35
Discharge at ungaged sites	467
Discharge at partial-record stations and miscellaneous sites	469
Crest-stage partial-record stations	469
Discharge measurements at miscellaneous sites	471
Analyses of water-quality samples collected at miscellaneous sites	473
Analyses of precipitation samples	475
Ground-water records	481
Ground-water levels	481
Index	489

CONTENTS

ILLUSTRATIONS

		Page
Figure 1.	Local identifier well-numbering system.....	29
2.	Map of Western Oregon showing location of active gaging stations.....	33
3.	Map of Western Oregon showing sites where water-quality data are obtained.....	34
4.	Map of Western Oregon showing location of partial-record stations.....	468
5.	Map of Western Oregon showing location of observation wells.....	480

TABLES

Table 1.	Temperature conversion table, degrees Celsius (°C) to degrees Fahrenheit (°F).....	25

LETTER AFTER STATION NAME DESIGNATES TYPE OF DATA:
(D) DISCHARGE, (E) ELEVATION OR CONTENTS, (C) CHEMICAL,
(B) BIOLOGICAL AND MICROBIOLOGICAL, (T) WATER TEMPERATURE,
(S) SEDIMENT

LOWER COLUMBIA RIVER BASIN
COLUMBIA RIVER AT WARRENDALE (ECBTS)..... 35
COLUMBIA RIVER AT MULTNOMAH FALLS (E)..... 42
COLUMBIA RIVER AT WASHOUGAL, WA (E)..... 44
SANDY RIVER BASIN
SANDY RIVER
SALMON RIVER NEAR GOVERNMENT CAMP (D)..... 46
SANDY RIVER NEAR MARMOT (D)..... 47
BULL RUN RIVER
BLAZED ALDER CREEK NEAR RHODODENDRON (D)..... 48
BULL RUN RIVER NEAR MULTNOMAH FALLS (DCTS)..... 49
FIR CREEK NEAR BRIGHTWOOD (DCTS)..... 56
NORTH FORK BULL RUN RIVER NEAR MULTNOMAH FALLS (DCTS). 63
DEER CREEK NEAR BULL RUN (C)..... 72
COUGAR CREEK NEAR BULL RUN (C)..... 75
BEAR CREEK NEAR BULL RUN (C)..... 78
BULL RUN RESERVOIR NUMBER ONE, NEAR BULL RUN (E)..... 81
BULL RUN RIVER
SOUTH FORK BULL RUN RIVER
FIVEMILE CREEK NEAR BULL RUN (C)..... 82
CAMP CREEK NEAR BULL RUN (C)..... 85
CEDAR CREEK NEAR BRIGHTWOOD (D)..... 88
SOUTH FORK BULL RUN RIVER NEAR BULL RUN (DCTS)..... 89
BULL RUN RESERVOIR NUMBER TWO, NEAR BULL RUN (E)..... 96
BULL RUN RIVER NEAR BULL RUN (D)..... 97
LITTLE SANDY RIVER NEAR BULL RUN (D)..... 98
WILLAMETTE RIVER BASIN
MIDDLE FORK WILLAMETTE RIVER NEAR OAKRIDGE (DT)..... 99
HILLS CREEK ABOVE HILLS CREEK LAKE, NEAR OAKRIDGE (DT).. 102

LOWER COLUMBIA RIVER BASIN--CONTINUED PAGE
COLUMBIA RIVER BASIN--CONTINUED
WILLAMETTE RIVER BASIN--CONTINUED
HILLS CREEK LAKE NEAR OAKRIDGE (E)..... 105
MIDDLE FORK WILLAMETTE RIVER ABOVE SALT CREEK, NEAR OAKRIDGE (DT)..... 106
SALMON CREEK NEAR OAKRIDGE (D)..... 109
GRAY CREEK NEAR OAKRIDGE (D)..... 110
WALDO LAKE NEAR OAKRIDGE (E)..... 111
WALDO LAKE OUTLET NEAR OAKRIDGE (D)..... 112
NORTH FORK OF MIDDLE FORK WILLAMETTE RIVER NEAR OAKRIDGE (D)..... 113
MIDDLE FORK WILLAMETTE RIVER BELOW NORTH FORK, NEAR OAKRIDGE (DT)..... 114
LOOKOUT POINT LAKE NEAR LOWELL (E)..... 117
MIDDLE FORK WILLAMETTE RIVER NEAR DEXTER (DT)..... 118
FALL CREEK NEAR LOWELL (DT)..... 121
WINBERRY CREEK NEAR LOWELL (DT)..... 124
FALL CREEK LAKE NEAR LOWELL (E)..... 127
FALL CREEK BELOW WINBERRY CREEK, NEAR FALL CREEK (DT)... 128
MIDDLE FORK WILLAMETTE RIVER AT JASPER (DT)..... 131
COAST FORK WILLAMETTE RIVER AT LONDON (DT)..... 134
COTTAGE GROVE LAKE NEAR COTTAGE GROVE (E)..... 137
COAST FORK WILLAMETTE RIVER BELOW COTTAGE GROVE DAM (D). 138
ROW RIVER ABOVE PITCHER CREEK, NEAR DORENA (D)..... 139
DORENA LAKE NEAR COTTAGE GROVE (E)..... 140
ROW RIVER NEAR COTTAGE GROVE (D)..... 141
ROW RIVER
MOSBY CREEK AT MOUTH, NEAR COTTAGE GROVE (D)..... 142
COAST FORK WILLAMETTE RIVER NEAR GOSHEN (D)..... 143
MCKENZIE RIVER BASIN
MCKENZIE RIVER AT OUTLET OF CLEAR LAKE (D)..... 144
SMITH RIVER ABOVE SMITH RIVER RESERVOIR, NEAR BELKNAP SPRINGS (D)..... 145
SMITH RIVER RESERVOIR NEAR BELKNAP SPRINGS (E)..... 146
MCKENZIE RIVER BELOW TRAIL BRIDGE DAM, NEAR BELKNAP SPRINGS (DCT)..... 147
DEER CREEK
BUDWORM CREEK NEAR BELKNAP SPRINGS (D)..... 151
MCKENZIE RIVER AT MCKENZIE BRIDGE (DCT)..... 152
SOUTH FORK MCKENZIE RIVER ABOVE COUGAR LAKE, NEAR RAINBOW (DT)..... 156
COUGAR LAKE NEAR RAINBOW (E)..... 159
SOUTH FORK MCKENZIE RIVER NEAR RAINBOW (DT)..... 160
BLUE RIVER BELOW TIDBITS CREEK, NEAR BLUE RIVER (DT).. 163
LOOKOUT CREEK NEAR BLUE RIVER (DT)..... 166
BLUE RIVER LAKE NEAR BLUE RIVER (E)..... 169
BLUE RIVER AT BLUE RIVER (DT)..... 170
MCKENZIE RIVER NEAR VIDA (DCT)..... 173

LOWER COLUMBIA RIVER BASIN--CONTINUED PAGE
COLUMBIA RIVER BASIN--CONTINUED
WILLAMETTE RIVER BASIN--CONTINUED
MCKENZIE RIVER BASIN--CONTINUED
GATE CREEK AT VIDA (D)..... 177
MOHAWK RIVER NEAR SPRINGFIELD (D)..... 178
WILLAMETTE RIVER AT HARRISBURG (DT)..... 179
LONG TOM RIVER NEAR NOTI (D)..... 182
COYOTE CREEK NEAR CROW (D)..... 183
FERN RIDGE LAKE NEAR ELMIRA (E)..... 184
LONG TOM RIVER NEAR ALVADORE (D)..... 185
AMAZON CREEK NEAR EUGENE (D)..... 186
LONG TOM RIVER AT MONROE (D)..... 187
MARYS RIVER NEAR PHILOMATH (D)..... 188
WILLAMETTE RIVER ABOVE CALAPOOIA RIVER, AT ALBANY (T)..... 189
CALAPOOIA RIVER AT HOLLEY (DT)..... 191
CALAPOOIA RIVER AT ALBANY (DT)..... 194
WILLAMETTE RIVER AT ALBANY (D)..... 197
NORTH SANTIAM RIVER (HEAD OF SANTIAM RIVER) BELOW BOULDER CREEK, NEAR DETROIT (DT)..... 198
BREITENBUSH RIVER
HUMBUG CREEK
EAST HUMBUG CREEK NEAR DETROIT (D)..... 201
BREITENBUSH RIVER ABOVE CANYON CREEK, NEAR NEAR DETROIT (DT)..... 202
DETROIT LAKE NEAR DETROIT (E)..... 205
NORTH SANTIAM RIVER AT NIAGARA (DT)..... 206
LITTLE NORTH SANTIAM RIVER NEAR MEHAMA (D)..... 209
NORTH SANTIAM RIVER AT MEHAMA (D)..... 210
SOUTH SANTIAM RIVER BELOW CASCADIA (DT)..... 211
MIDDLE SANTIAM RIVER NEAR CASCADIA (DT)..... 214
QUARTZVILLE CREEK NEAR CASCADIA (DT)..... 217
GREEN PETER LAKE NEAR FOSTER (E)..... 220
FOSTER LAKE AT FOSTER (E)..... 221
WILEY CREEK AT FOSTER (D)..... 222
SOUTH SANTIAM RIVER NEAR FOSTER (DT)..... 223
SOUTH SANTIAM RIVER AT WATERLOO (DT)..... 226
THOMAS CREEK NEAR SCIO (D)..... 229
SANTIAM RIVER AT JEFFERSON (DT)..... 230
LUCKIAMUTE RIVER NEAR SUVER (D)..... 233
WILLAMETTE RIVER AT SALEM (DCT)..... 234
SOUTH YAMHILL RIVER (HEAD OF YAMHILL RIVER) NEAR WILLAMINA (D)..... 237
WILLAMINA CREEK NEAR WILLAMINA (D)..... 238
SOUTH YAMHILL RIVER NEAR WHITESON (D)..... 239
NORTH YAMHILL RIVER NEAR FAIRDALE (D)..... 240

LOWER COLUMBIA RIVER BASIN--CONTINUED PAGE
COLUMBIA RIVER BASIN--CONTINUED
WILLAMETTE RIVER BASIN--CONTINUED
SOUTH YAMHILL RIVER BASIN--CONTINUED
NORTH YAMHILL RIVER--CONTINUED
HASKINS CREEK RESERVOIR NEAR MCMINNVILLE (E)..... 241
HASKINS CREEK BELOW RESERVOIR, NEAR MCMINNVILLE (D). 242
MOLALLA RIVER ABOVE PINE CREEK, NEAR WILHOIT (D)..... 243
PUDDING RIVER
BUTTE CREEK AT MONITOR (D)..... 244
TUALATIN RIVER
TUALATIN RIVER NEAR GASTON (DCTS)..... 245
SCOGGINS CREEK
HENRY HAGG LAKE NEAR GASTON (E)..... 249
SCOGGINS CREEK BELOW HENRY HAGG LAKE, NEAR GASTON (D). 250
TUALATIN RIVER NEAR DILLEY (D)..... 251
GALES CREEK NEAR FOREST GROVE (D)..... 252
OSWEGO CANAL NEAR LAKE OSWEGO (D)..... 253
TUALATIN RIVER AT WEST LINN (DCBTS)..... 254
WILLAMETTE RIVER ABOVE FALLS, AT OREGON CITY (E)..... 261
WILLAMETTE RIVER BELOW FALLS, AT OREGON CITY (E)..... 262
CLACKAMAS RIVER
TIMOTHY LAKE NEAR GOVERNMENT CAMP (E)..... 264
OAK GROVE FORK NEAR GOVERNMENT CAMP (D)..... 265
OAK GROVE FORK ABOVE POWERPLANT INTAKE (D)..... 266
CLACKAMAS RIVER ABOVE THREE LYNX CREEK (D)..... 267
CLACKAMAS RIVER AT ESTACADA (D)..... 268
CLACKAMAS RIVER NEAR CLACKAMAS (D)..... 269
JOHNSON CREEK AT SYCAMORE (D)..... 270
WILLAMETTE RIVER AT PORTLAND (DCBTS)..... 271
COLUMBIA RIVER AT COLUMBIA CITY (E)..... 277
COLUMBIA RIVER AT RAINIER (E)..... 279
COLUMBIA RIVER AT WAUNA (E)..... 281
COLUMBIA RIVER AT BRADWOOD (CT)..... 283
PACIFIC SLOPE BASINS IN OREGON
NEHALEM RIVER BASIN
NEHALEM RIVER NEAR FOSS (DCBTS)..... 285
WILSON RIVER BASIN
WILSON RIVER NEAR TILLAMOOK (D)..... 292
NESTUCCA RIVER BASIN
MCGUIRE LAKE NEAR FAIRDALE (E)..... 293
NESTUCCA RIVER NEAR FAIRDALE (D)..... 294
NESTUCCA RIVER NEAR BEAVER (DT)..... 295
SILETZ RIVER BASIN
SILETZ RIVER
BIG ROCK CREEK NEAR VALSETZ (T)..... 298
SILETZ RIVER AT SILETZ (DT)..... 300

PACIFIC SLOPE BASINS IN OREGON--CONTINUED PAGE
YAQUINA RIVER BASIN
YAQUINA RIVER NEAR CHITWOOD (D)..... 303
ALSEA RIVER BASIN
NORTH FORK ALSEA RIVER AT ALSEA (D)..... 304
FIVE RIVERS NEAR FISHER (D)..... 305
ALSEA RIVER NEAR TIDEWATER (DCBTS)..... 306
BIG CREEK BASIN
BIG CREEK NEAR ROOSEVELT BEACH (D)..... 312
SIUSLAW RIVER BASIN
SIUSLAW RIVER
LAKE CREEK NEAR DEADWOOD (D)..... 313
SIUSLAW RIVER NEAR MAPLETON (DCBTS)..... 314
NORTH FORK SIUSLAW RIVER NEAR MINERVA (D)..... 321
UMPQUA RIVER BASIN
SOUTH UMPQUA RIVER (HEAD OF UMPQUA RIVER)
JACKSON CREEK NEAR TILLER (D)..... 322
SOUTH UMPQUA RIVER AT TILLER (D)..... 323
ELK CREEK NEAR DREW (D)..... 324
SOUTH UMPQUA RIVER AT DAYS CREEK (DCT)..... 325
COW CREEK NEAR AZALEA (D)..... 328
WEST FORK COW CREEK NEAR GLENDALE (D)..... 329
COW CREEK NEAR RIDDLE (D)..... 330
NORTH MYRTLE CREEK NEAR MYRTLE CREEK (D)..... 331
LOOKINGGLASS CREEK AT BROCKWAY (D)..... 332
SOUTH UMPQUA RIVER NEAR BROCKWAY (D)..... 333
SOUTH UMPQUA RIVER NEAR ROSEBURG (CT)..... 334
NORTH UMPQUA RIVER
LAKE CREEK NEAR DIAMOND LAKE (D)..... 341
LEMOLO LAKE NEAR TOKETEE FALLS (E)..... 342
NORTH UMPQUA RIVER BELOW LEMOLO LAKE, NEAR TOKETEE FALLS (D)..... 343
CLEARWATER RIVER ABOVE TRAP CREEK, NEAR TOKETEE FALLS (D)..... 344
FISH CREEK AT BIG CAMAS RANGER STATION, NEAR TOKETEE FALLS (D)..... 345
NORTH UMPQUA RIVER ABOVE COPELAND CREEK, NEAR TOKETEE FALLS (D)..... 346
STEAMBOAT CREEK NEAR GLIDE (D)..... 347
LITTLE RIVER AT PEEL (D)..... 348
NORTH UMPQUA RIVER AT WINCHESTER (DT)..... 349
CALAPOOYA CREEK AT NONPAREIL (D)..... 352
UMPQUA RIVER NEAR ELKTON (DCBTS)..... 353
ELK CREEK NEAR ELKTON (C)..... 359
PARADISE CREEK NEAR ELKTON (C)..... 360
WEATHERLY CREEK NEAR SCOTTSBURG (C)..... 361
MILL CREEK NEAR SCOTTSBURG (C)..... 362
DEAN CREEK NEAR REEDSPORT (C)..... 363

PACIFIC SLOPE BASINS IN OREGON--CONTINUED PAGE
UMPQUA RIVER BASIN--CONTINUED
SCHOLFIELD CREEK NEAR REEDSPORT (C)..... 364
SMITH RIVER NEAR GARDINER (C)..... 365
NORTH FORK SMITH RIVER NEAR GARDINER (C)..... 366
COOS RIVER BASIN
SOUTH FORK COOS RIVER
MILLICOMA RIVER
WEST FORK MILLICOMA RIVER NEAR ALLEGANY (D)..... 367
COOS BAY
PONY CREEK AT COOS BAY (D)..... 368
COQUILLE RIVER BASIN
SOUTH FORK COQUILLE RIVER AT POWERS (D)..... 370
NORTH FORK COQUILLE RIVER NEAR FAIRVIEW (D)..... 371
ROGUE RIVER BASIN
ROGUE RIVER ABOVE PROSPECT (D)..... 372
ROGUE RIVER BELOW PROSPECT (DCTS)..... 373
SOUTH FORK ROGUE RIVER NEAR PROSPECT (D)..... 381
MIDDLE FORK ROGUE RIVER
RED BLANKET CREEK NEAR PROSPECT (D)..... 382
SOUTH FORK ROGUE RIVER, SOUTH OF PROSPECT (DTS)..... 383
LOST CREEK LAKE NEAR MCLEOD (E)..... 387
ROGUE RIVER AT MCLEOD (CTS)..... 388
SOUTH FORK BIG BUTTE CREEK NEAR BUTTE FALLS (D)..... 395
BIG BUTTE CREEK NEAR MCLEOD (DT)..... 396
ROGUE RIVER NEAR MCLEOD (DT)..... 399
ELK CREEK NEAR CASCADE GORGE (DT)..... 402
WEST BRANCH ELK CREEK NEAR TRAIL (DT)..... 405
ELK CREEK NEAR TRAIL (DT)..... 408
ROGUE RIVER AT DODGE BRIDGE, NEAR EAGLE POINT (DT)..... 411
SOUTH FORK LITTLE BUTTE CREEK NEAR LAKECREEK (D)..... 414
NORTH FORK LITTLE BUTTE CREEK AT FISH LAKE, NEAR LAKECREEK (D)..... 415
NORTH FORK LITTLE BUTTE CREEK NEAR LAKECREEK (D)..... 416
EMIGRANT CREEK (HEAD OF BEAR CREEK)
EMIGRANT CREEK NEAR ASHLAND (D)..... 417
WEST FORK ASHLAND CREEK NEAR ASHLAND (D)..... 418
EAST FORK ASHLAND CREEK NEAR ASHLAND (D)..... 419
BEAR CREEK AT MEDFORD (D)..... 420
ROGUE RIVER AT RAYGOLD, NEAR CENTRAL POINT (DT)..... 421
ROGUE RIVER AT GRANTS PASS (DT)..... 424
APPLEGATE RIVER
MIDDLE FORK APPLEGATE RIVER (HEAD OF APPLEGATE RIVER) NEAR COPPER (D)..... 427
ELLIOT CREEK NEAR COPPER (DTS)..... 431
CARBERRY CREEK NEAR COPPER (DT)..... 436
APPLEGATE RIVER NEAR COPPER (DT)..... 439
APPLEGATE RIVER NEAR APPLEGATE (DT)..... 442
APPLEGATE RIVER NEAR WILDERVILLE (DT)..... 445

PACIFIC SLOPE BASINS IN OREGON--CONTINUED PAGE
ROGUE RIVER BASIN--CONTINUED
ROGUE RIVER NEAR MERLIN (T)..... 448
GRAVE CREEK AT PEASE BRIDGE, NEAR PLACER (D)..... 450
ROGUE RIVER AT MARIAL (T)..... 451
ROGUE RIVER NEAR AGNESS (DCBTS)..... 453
EAST FORK ILLINOIS RIVER (HEAD OF ILLINOIS RIVER) NEAR TAKILMA (D)..... 460
SUCKER CREEK BELOW LITTLE GRAYBACK CREEK, NEAR HOLLAND (D)..... 461
WEST FORK ILLINOIS RIVER BELOW ROCK CREEK, NEAR O'BRIEN (D)..... 462
ILLINOIS RIVER NEAR KERBY (D)..... 464
ILLINOIS RIVER NEAR AGNESS (D)..... 465
CHETCO RIVER BASIN
CHETCO RIVER NEAR BROOKINGS (D)..... 466

WATER RESOURCES DATA FOR OREGON, 1980

INTRODUCTION

Water resources data for the 1980 water year for Oregon consists of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; water-levels and water quality of wells and springs; and water quality of precipitation. This report, in two volumes, contains discharge records for 287 gaging stations; stage only records for 10 gaging stations; stage and contents for 41 lakes and reservoirs; water quality for 98 gaging stations; and water levels for 68 observation wells; and water quality for 6 precipitation stations. Also included are data for 49 crest-stage partial-record stations. Locations of these sites, except for precipitation stations, are shown on figures 2, 3, 4, and 5. Additional water data were collected at various sites, not part of the systematic data collection program, and are published as miscellaneous measurements and analyses. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Oregon.

Records of discharge of streams, and contents (or stage) of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled, "Surface Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and then in a multi-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States." Records of ground-water levels are published from 1935 to 1974 in a series of water-supply papers entitled, "Ground-water Levels in the United States." Water-supply papers may be consulted in the libraries of the principal cities in the United States or may be purchased from the Branch of Distribution, U.S. Geological Survey, 1200 Eads Street, Arlington, VA 22202.

For water years 1961 through 1974, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1974 were similarly released either in separate reports or in conjunction with streamflow records.

Beginning with the 1975 water year, water data for streamflow, water quality, and ground water are published as an official Survey report on a State-boundary basis. These official Survey reports carry an identification number consisting of the two letter State abbreviation, the last two digits of the water year, and volume number. For example, this report is identified as "U.S. Geological Survey Water-Data Report OR-80-2." For archiving and general distribution, the reports for water years 1971-74 are also identified as water-data reports. These water-data reports are for sale, in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161. Additional information, including current prices, for ordering specific reports may be obtained from the district chief at the address given on the back of the title page or by telephone (503) 231-2009.

COOPERATION

The U.S. Geological Survey and organizations of the State of Oregon have had cooperative agreements for the systematic collection of surface-water records since 1905. Organizations that supplied data are acknowledged in station descriptions. Organizations that assisted in collecting data through cooperative agreements with the Survey are:

Oregon Water Resources Department, James E. Sexson, Director.

Oregon Department of Fish and Wildlife, John R. Donaldson, Director.

Oregon Department of Transportation, Highway Division, H.S.Coulter, State Highway Engineer.

Coos, Douglas, Lane, Multnomah, Wasco, Counties, and Clark County, Washington.

Lane Council of Governments

Cities of Coos Bay-North Bend, Eugene, McMinnville, Medford, Portland, Reedsport, Salem.

Burnt River Irrigation District.

Umatilla Tribal Council.

Warm Springs Tribal Council.

Assistance in the form of funds or services was given by the Forest Service, Soil Conservation Service, U.S. Department of Agriculture; Corps of Engineers, U.S. Army; Bonneville Power Administration, U.S. Department of Energy; Bureau of Reclamation, Fish and Wildlife Service, Bureau of Land Management, and National Park Service, U.S. Department of the Interior; Eugene Water & Electric Board; Pacific Power & Light Co.; Portland General Electric Co.; Idaho Power Co., Idaho; Clark County Department of Public Works, Washington.

GENERAL HYDROLOGIC SETTING

The hydrology of Oregon is influenced by five mountain ranges. These ranges divide the state into drainage basins and greatly affect the distribution of precipitation. The Cascade Range provides a natural division between western and eastern Oregon. Hydrologic patterns are generally uniform from drainage basin to drainage basin throughout western Oregon, whereas in eastern Oregon hydrologic patterns vary widely between drainage basins.

Eastern Oregon Hydrology

Eastern Oregon has more complex hydrologic patterns than western Oregon. Precipitation is less than 10 in. per year in the semiarid regions, such as parts of the north-central area, the closed basin in south-central Oregon, and southeastern Oregon. The northeastern part of the state receives as much as 80 in. of precipitation per year, much of it occuring as snow fall. On the large streams in eastern Oregon, flooding can result from winter rains and (or) seasonal snowmelt; in the smaller drainage basins, flooding can result from winter rains, seasonal snowmelt, and convection storms.

Western Oregon Hydrology

Western Oregon, which composes about one-third of the total area of the state, has a climate characterized by moderate temperatures, wet winters, and dry summers. About 80 percent of the precipitation occurs between October and March. Annual precipitation in western Oregon ranges from about 20 in. per year in the lower elevations in the southern part of the area to about 200 in. per year in the Coast and Cascade Ranges. In general, streamflow characteristics are similar throughout western Oregon, with most of the runoff and flooding on both large and small streams being caused by winter rains. Major floods have occurred when winter rains combine with melting snow. The major hydrologic regions of western Oregon include: (1) the Willamette River valley, which drains the east slopes of the Coast Range and west slopes of the Cascade Range; (2) the north coast (where annual precipitation reaches 200 in. in some areas) and south coast, which drain the west slopes of the Coast Range; and (3) the Rogue and Umpqua Basins in southwestern Oregon, which drain the west slopes of the Cascade Range and cut through the Coast Range westward to the Pacific Ocean.

HYDROLOGIC CONDITIONS FOR WESTERN OREGON DURING THE 1980 WATER YEAR

During the 1980 water year flows were moderately below average throughout western Oregon. Precipitation was generally slightly below average throughout western Oregon; however, the Cascade Mountain Range experienced an extremely light snowpack. The reason for the apparent anomaly of a light snowpack during a year of near average precipitation is that the freezing level remained very high throughout the winter and the precipitation that fell high in the mountains was rain rather than snow. As of April 1, 1980, most watersheds in the Cascades in Oregon had only a 15 to 20 percent snowpack according to the U.S. Soil Conservation Service. In a normal season the Columbia basin snowpack reaches its maximum depth around April 1.

The peak flow for the year at almost all of the streams in western Oregon occurred in the middle of January as the result of a statewide rain storm. No major flooding or drought occurred in the state during the 1980 water year.

Willamette River Basin

Flows in the Willamette River basin were below average in the 1980 water year. A typical stream in the basin, such as the North Santiam River at Detroit (station 14178000), which drains part of the Cascade Range, had a mean discharge that was 81 percent of the 56-year average. The Tualatin River at West Linn (station 14207500), which drains a part of the Coast Range, had a mean discharge that was 98 percent of the 53-year mean. The mean flow of Willamette River at Salem (station 14191000) was 84 percent of the 65-year mean.

Precipitation at Portland was about 3 inches above average for the water year, and was 5 inches above average for Eugene. Snowpack in the Cascade Range on April 1 was well below average. Highest flows on most streams occurred in the middle of January as the result of a statewide rain storm. Peak flow on North Santiam River (station 14178000) had an exceedance probability of 50 percent, a very low magnitude flood event. This means that a flood of at least this magnitude has a 50 percent chance of occurring in any one year.

Another way of describing a 50 percent exceedance probability would be that a flood of this magnitude would probably be exceeded on the average of every two years. In the Sandy River basin, adjacent to and just north of the Willamette River basin, peak flow of Sandy River near Marmot (station 14137000) on January 14 had an exceedance probability of about 50 percent. The Sandy River is a glacial fed stream.

In the 1980 water year, Tualatin River at West Linn had a higher concentration of nitrite plus nitrate nitrogen than normal for the previous 5 years. Willamette River at Portland (station 14211720) had higher concentrations of total and dissolved iron than normal. The reason for these higher readings is not known.

North Coast Region

In the 1980 water year, flows in the north coast region were generally well below average. The Alsea River is typical of streams in that region and provides an index of the flow pattern. Average runoff at the Tidewater gaging station (14306500) was only 88 percent of the long term average.

The peak flow for the year occurred on January 12 and represented a small flood event, at an exceedance probability of 50 percent.

Most chemical concentrations were not significantly different from those in previous years for Nehalem River near Foss (station 14301000) and Siuslaw River near Mapleton (station 14307620). Exceptions include significantly higher concentrations of dissolved arsenic and lower concentrations of total lead in the Nehalem River as well as lower concentrations of sulfate and higher concentrations of ammonia plus organic nitrogen and total nitrogen in the Siuslaw River.

South Coast Region

Flows in the south coastal region were well below average in the 1980 water year. The South Fork Coquille River is typical of streams in that region. Mean flow for the year at the gaging station at Powers (14325000) was 95 percent of the long-term mean.

Peak discharge of the year occurred on January 12 with an exceedance probability of 50 percent.

Southwest Region

Flows of streams in southwestern Oregon that drain the Cascade Range were slightly below average in the 1980 water year. The two principal streams are the Rogue and Umpqua Rivers. The Rogue River is regulated by Lost Creek Reservoir, but the Umpqua River is virtually uncontrolled. Umpqua River near Elkton (station 14321000) had a mean discharge in the 1980 water which was 86 percent of the 75-year average.

Precipitation in the area was generally well below average during the 1980 water year. Snow pack in the southern Cascade Range in April was much below average. Peak flow at Elkton was 103,000 ft^3/s on January 14 and had an exceedance probability of about 50 percent.

Significant differences in chemical concentrations for 1980 water year as compared to previous years for Umpqua River at Elkton include higher concentrations of ammonia plus organic nitrogen and total nitrogen and lower concentrations of sulfate and total lead. Differences in chemical concentrations for 1980 water as compared to previous years for Rogue River near Agness (station 14372300) include higher concentrations of nitrite plus nitrate nitrogen and total nitrogen, higher pH values, and lower concentrations of dissolved and total lead. The cause of these differences is not known.

GROUND-WATER LEVELS IN WESTERN OREGON, 1980 WATER YEAR

Data from key long-term observation wells in western Oregon indicate that ground-water levels were near or slightly above average for most of the 1980 water year and ground-water storage remained near normal for the year.

WATER QUALITY OF PRECIPITATION

Between May and September 1980, precipitation samples were collected at Bull Run, Gresham, and Nehalem, Oreg. These wetfall samples were collected only during rainfall events and exclude the effects of dry fallout. A summary of the data is listed below for each sampling site:

Parameter	No. of analyses	Maximum	Minimum	Median
	Bull Run			
pH (units)	21	5.7	4.2	4.6
Specific conductance (umoh/cm at 25°C)	21	40	6	15
Sulfate, dissolved (ag/L as SO_4)	21	3,000	200	1,100
Nitrogen, dissolved nitrate (ug/L as N)	21	510	<10	110
	Gresham			
pH (units)	14	6.1	4.2	4.8
Specific conductance (umho/cm at 25°C)	12	81	6	12
Sulfate, dissolved (ug/L as SO_4)	14	7,000	400	1,000
Nitrogen, dissolved nitrate (ug/L as N)	14	1,000	<10	<10
	Nehalem			
pH (units)	13	7.0	4.6	5.1
Specific conductance (umho/cm at 25°C)	12	100	4	14
Sulfate, dissolved (ug/L as SO_4)	15	1,800	<10	700
Nitrogen, dissolved nitrate (ug/L as N)	15	130	<10	10

Pure water (distilled water saturated with atmospheric carbon dioxide) would have a pH of 5.6 and a specific conductance equal to, or less than, 5 umho/cm at 25°C.

DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. See also table for converting English units to International System of Units (SI) on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Algae are mostly aquatic single-celled, colonial, or multicelled plants containing chlorophyll and lacking roots, stems, and leaves.

Bacteria are microscopic unicellular organisms, typically spherical, rod-like, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that may be used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as all the organisms which produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C $\pm$ 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Fecal coliform bacteria are bacteria that are present in the intestine or feces of warmblooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory, they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C $\pm$ 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Fecal streptococcal bacteria are bacteria found also in the intestine of warmblooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C $\pm$ 1.0°C on M-enterrococcus medium (nutient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Benthic organisms (invertebrates) are animals inhabiting the bottom of an aquatic environment. They include a number of different types of organisms, such as bacteria, fungi, insect larvae and nymphs, snails, clams, and crayfish. They are frequently used as indicators of environmental quality because many have restricted mobility during their aquatic life phase, as well as a relatively long lifespan which allows for response to prevailing and changing water-quality conditions. Many benthic organisms inhabit specific types of environments which, if changed, result in changes in the composition of the benthic community.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, used for decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the weight per unit area or volume of habitat.

Ash weight is the weight or amount of residue present after the residue from the dry weight determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash weight values of zooplankton and phytoplankton are expressed as g/m (grams per cubic meter), and periphyton and benthic organisms in g/m^2 (grams per square meter).

Dry weight refers to the weight of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the weight remains unchanged. This weight represents the total organic matter, ash and sediment, in the sample. Dry weight values are expressed in the same units as ash weight.

Chlorophyll refers to the green pigments of plants. Chlorophyll *a* and *b* are the two most common green pigments in plants.

Cfs-day (ft^3/s-day) is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, or about 646,000 gallons, or 2,445 cubic meters. It represents a runoff of approximately 0.0372 inch from 1 square mile or 0.3468 millimeter from 1 square kilometer.

Chemical oxygen demand (COD) indicates the quantity of oxidizable compounds in water and varies with water composition(s), temperature, period of contact, and other factors.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Continuing water-quality record station is a specified site which meets one or all conditions listed.

1. Where chemical samples are collected daily or monthly for 10 or more months during the water year.
2. Where water-temperature records include observations taken one or more times daily.
3. Where sediment discharge records include those periods for which sediment loads are computed and are considered to be representative of the runoff for the water year.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Cubic foot per second (ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Discharge is the volume of water (or more broadly, total fluids) that passes a given point within a given period of time.

Mean discharge is the arithmetic average of discharge during a specific period.

Instantaneous discharge is the discharge at a given time.

Dissolved refers to that material in a representative water sample which passes through a 0.45 um membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate. It is recognized that certain kinds of samples cannot be filtered; to provide for this, procedures that are considered equivalent to filtering through a 0.45 um membrane filter will be identified and announced at a later date.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeable with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an 8-digit number.

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic detergent compounds.

Micrograms per liter (UG/L, ug/l) is a unit expressing the concentration of chemical constituents in solution as weight (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/l) is a unit for expressing the concentrations of chemical constituents in solution. Milligrams per liter represents the weight of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/l, and is based on the mass of sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

Organism is any living entity, such as an insect, phytoplankter, or zooplankter.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample volume, usually milliliters (ml) or liters (l).

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meters (m), acres, or hectares. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually millimeters (ml) or liters (l). Number of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Partial-record station is a particular site where limited streamflow or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined either by sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay.....	0.00024 - 0.004	Sedimentation.
Silt.....	.004 - .062	Sedimentation.
Sand.....	.062 - 2.0	Sedimentation or sieve.
Gravel.....	2.0 - 64.0	Sieve.

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed, and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

Percent of total is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, number, weight, or volume.

Periphyton is the assemblage of microorganisms attached to and growing upon solid surfaces. While consisting primarily of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton is a useful indicator of water quality.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are primary food producers in the aquatic environment and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per ml of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algal mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per ml of sample.

Plankton is the floating (or weakly swimming) animal or plant life in a body of water consisting chiefly of minute plants (as diatoms and blue-green algae) and of minute animals (as protozoan, entomostracans, and various larvae).

Runoff in inches (IN.) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff." Streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45 um membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less that the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45 um membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total".

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchial scheme beginning with kingdom and ending with species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, Hexagenia limbata is the following:

Kingdom	Animal
Phylum	Arthropoda
Class	Insecta
Order	Emphemeroptera
Family	Ephemeridae
Genus	Hexagenia
Species	Hexagenia limbata

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperature of a stream. "Temperature recorder" is the term used to indicate the presence of a thermograph or a digital mechanism that records water temperature in digital format on punched paper tape.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the water year.

Tons per acre-foot indicates the dry weight of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour day.

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likly to produce different analytical results.

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total". (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determines all of the constituent in the sample.)

Turbidity of a sample is the reduction of transparency due to the presence of particulate matter. In this report it is expressed in Jackson turbidity units (JTU).

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the year after thorough mixing in the reservoir.

WRD is used as an abbreviation for "Water-Resources Data" in the summary "REVISIONS" paragraph to refer to previously published State annual hydrologic data reports.

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

SPECIAL NETWORKS AND PROGRAMS

Some of the stations for which data are published in this report are included in special networks and programs. These stations are identified by their title, set in parentheses, under the station name.

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

National stream-quality accounting network (NASQAN) is an accounting network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated in the network design. Areal configuration of the network is based on river-basin accounting units designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of water-quality conditions nationwide on a year-to-year basis and (2) to detect and assess long-term changes in stream quality.

Pesticide program is a network of regularly sampled water-quality stations where additional monthly samples are collected to determine the concentration and distribution of pesticides in streams whose waters are used for irrigation or in streams in areas where potential contamination could result from the application of the commonly used insecticides and herbicides.

Pesticides are chemical compounds used to control the growth of undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Since the first application of DDT as an insecticide in the early 1930's, there have been almost 60,000 pesticide formulations registered, each containing at least one of the approximately 800 different basic pesticide compounds. The United States annually produces about 1 billion pounds. Chlorinated hydrocarbon pesticides are still commonly used in many areas of the country, although efforts are being made to replace many of them with more specific, fast-acting, and easily degradable compounds.

Precipitation program was initiated by the U.S. Geological Survey after the eruption of Mount St. Helens to collect data on the quantity and quality of precipitation for specific events. Primary objectives of the program are to determine (1) the general quality of precipitation and (2) the effect of ash from Mount St. Helens on the quality of precipitation.

Radiochemical program is a network of regularly sampled water-quality stations where additional samples are collected monthly or twice a year (at high and low flow) to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Radioisotopes are isotope forms of an element that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight, but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus. For example: Ordinary chlorine is a mixture of isotopes having atomic weights of 35 and 37, with the natural mixture having atomic weight of about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron (Rose, 1966). There are 275 isotopes of the 81 stable elements in addition to more than 800 radioactive isotopes.

Radioisotopes that are determined in this program are natural uranium in ug/l (micrograms per liter), radium as radium-226 in PC/L (pCi/l, picocuries per liter), gross beta radiation as equivalent strontium/yttrium-90 or cesium-137 in PC/L, and gross alpha radiation as micrograms of uranium equivalent per liter (ug/l). Gross alpha and beta radioactivity associated with the fine-grained (silt- and clay- sized) sediments in the samples are also determined.

A picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.2 dpm (disintegrations per minute).

DOWNSTREAM ORDER AND STATION NUMBER

Stations are listed in downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which those tributaries enter the main stream. Stations on tributaries entering above all main-stream stations are listed before the first main-stream station. Stations on tributaries to tributaries are listed in a similar manner. In the list of stations in the front of this report, the rank of tributaries is indicated by indention, each indention representing one rank.

As an added means of indentification, each water-quality station, gaging station, and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record and continous-record stations; therefore, the station number for a partial-record station indicated downstream order position in a list made up of both types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station. Gaps are left in the numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station, such as 14105700 which appears just to the left of the station name, includes the 2-digit part number "14" plus the 6-digit downstream order number "105700." In this report, the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines. All records for a drainage basin encompassing more than one State could be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and Computation of Data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals; and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from a water-stage recorder which gives a continuous graph of the fluctuations (for digital recorders, a tape punched at 15-, 30-, or 60-minute intervals) or from direct readings on a nonrecording gage. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in standard textbooks on the measurement of stream discharge. Surface areas of lakes or reservoirs are determined from instrument surveys using standard methods.

For a stream-gaging station, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves defined by discharge measurements. If extensions to the rating curves are necessary to define the extremes of discharge, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), velocity-area studies, and logarithmic plotting. The application of the daily mean gage heights to the rating table gives the daily mean discharge, from which the monthly and the yearly mean discharge are computed. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations the stage-discharge relations is affected by backwater from reservoirs, tributary streams, or other causes. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in determining discharge. Information required for determining the slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in determining discharge.

At some stream-gaging stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of the gage-height record and occasional winter discharge measurements, consideration being given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. Discharge over spillways is computed from a stage-discharge relations curve defined by discharge measurements. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys, the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, good record at adjoining stations, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated on the basis of operator's log, good record at adjoining stations, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of hydrologic data. For gaging stations on streams or canals, a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs, a monthly summary table of stage and contents or a table showing the daily contents is given. Tables of daily mean gage heights are included for some streamflow stations and for some reservoir stations. Records are published for the water year, which begins on October 1 and ends on
September 30.

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gage, general remarks, average discharge, and extremes of published records. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published, along with the current records, in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1933 stands for the water year October 1, 1932, to September 30, 1933. If no daily, monthly, or annual figures of discharge are affected by the revision, that fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised: "(m)" that only the instantaneous minimum was revised; and "(P)" that only the peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given.

The type of gage currently in use; the datum of the present gage referred to National Geodetic Vertical Datum; and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." National Geodetic Vertical Datum is explained in "DEFINITION OF TERMS" on page 11.

Information pertaining to the accuracy of the discharge records, and to conditions that affect the natural flow at the gaging station, is given under "REMARKS"; for reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway and purpose and use of the reservoir is also given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. Under "EXTREMES" are given: First, the extremes for the period of record; second, information available outside the period of record; and last, those for the current year. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a non-recording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with EXTREMES FOR THE CURRENT YEAR: if they are all independent peaks (including the maximum for the year) above the selected base, with the time of occurrence and corresponding gage heights, are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The line headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the

month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN"), or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion, if the drainage area includes large noncontributing areas, or if the average annual rainfall over the drainage basin is usually less than 20 inches. In the yearly summary below the monthly summary, the figures shown are the appropriate daily discharges for the calendar and water years.

Footnotes to the table of daily discharges are introduced by the word "NOTE." Footnotes are used to indicated periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-discharge relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and monthly summary table to stage and contents. For some reservoirs a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis, but it is not published for reservoirs for which only monthly data are given.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in a table of annual maximum stage and discharge at crest-stage stations. The table of partial-record stations is followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. Occasionally, a series of discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are also given in special tables following the tables of partial-record stations.

Accuracy of Data

The accuracy of discharge data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretation of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges is within 5 percent, "good" within 10 percent, and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge are shown to the nearest hundreth of a cubic foot per second for discharges of less than 1 ft^3/s, to tenths between 1.0 and 10 ft^3/s, to whole numbers between 10 and 1,000 ft^3/s, and to three significant figures greater than 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumptive use, regulation, evaporation, or other factors. For such stations, discharge in cubic feet per second per square mile and runoff in inches are not published unless satisfacory adjustments can be made for such effects. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or unadjusted losses (consumptive use, evaporation, seepage, etc.) are large in comparison with the observed discharge.

Other Data Available

Monthly records for several ungaged sites are given in a separate section following the gaged sites. The accuracy of records for ungaged sites is generally lower than that for gaged sites, depending on the precision of the computation method and the accuracy of data used in the computations.

For most gaging stations, unpublished, detailed information, on file in the district office, includes discharge measurements, gage-height records, and rating tables. Many gaging-station records in Oregon through 1967 have been analyzed to determine several statistical summaries: (1) the number of days in each year that the daily discharge was between selected limits (duration tables), (2) the lowest mean discharge for selected numbers of consecutive days in each year, and (3) the highest mean discharge for selected number of consecutive days in each year.

Records of Discharge Collected by Agencies Other than the Geological Survey

Other Federal and State agencies have collected discharge data at other sites in Oregon during the current water year. Although these records have not been published by the U.S. Geological Survey, the National Water Data Exchange, NAWDEX, Water Reserouces Division, U.S. Geological Survey, National Center, Reston, VA., 22092, maintains an index of these sites and will furnish information about them.

EXPLANATION OF WATER-QUALITY RECORDS

Collection and Computation of Data

Records of surface water quality are listed in downstream order by station number. The data generally are collected at or near gaging stations, and are reported immediately following other records for those stations. Water-quality data for most ungaged sites are listed with the records for other surface-water stations, in regular downstream order. The exceptions are the less detailed data for several ungaged sites, which are grouped separately in the section titled "Analyses of samples collected at water-quality partial-record stations."

The descriptive headings for detailed records of surface-water quality give periods of record for the various categories of data, extremes for certain pertinent data, and general remarks. For less detailed records, only the overall period of record is listed.

For ground-water records, no descriptive statements are given; however, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses.

Water analysis

Most methods for collecting and analyzing water samples are described in the U.S. Geological Survey publications on Techniques of Water-Resources Investigations, which are listed on page 33.

One stream-water sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample for the accurate determination of mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling

as much as possible, consistent with available sampling techniques and methods of analysis. Where an apparent inconsistency exists between a reported pH value and relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with digital monitors, the published records consist of daily maximum, minimum, and mean values. More detailed records may be obtained from the district office.

Since October 1967, the U.S. Geological Survey has used the metric system for reporting data on chemical constituents and concentrations of suspended sediment. Chemical constituents are now reported in milligrams per liter (mg/l) except for certain minor elements that are reported in micrograms per liter (ug/l). Suspended sediment is reported in milligrams per liter and water temperatures in degrees Celsius (°C). In water with a density of 1,000 g/ml, values in parts per million should be multiplied by the density to convert to milligrams per liter. To convert temperature in degrees Celsius to degrees Fahrenheit, see table 1 below.

In October 1968, the Geological Survey began reporting many of the chemical constituents as well as the minor elements in micrograms per liter instead of milligrams per liter. (See "Definitions of terms", page 11.)

Table 1.--Degrees Celsius (°C) to degrees Fahrenheit (°F)*
(Temperature reported to nearest 0.5°C)

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	10.0	50	20.0	68	30.0	86	40.0	104
.5	33	10.5	51	20.5	69	30.5	87	40.5	105
1.0	34	11.0	52	21.0	70	31.0	88	41.0	106
1.5	35	11.5	53	21.5	71	31.5	89	41.5	107
2.0	36	12.0	54	22.0	72	32.0	90	42.0	108
2.5	36	12.5	54	22.5	72	32.5	90	42.5	108
3.0	37	13.0	55	23.0	73	33.0	91	43.0	109
3.5	38	13.5	56	23.5	74	33.5	92	43.5	110
4.0	39	14.0	57	24.0	75	34.0	93	44.0	111
4.5	40	14.5	58	24.5	76	34.5	94	44.5	112
5.0	41	15.0	59	25.0	77	35.0	95	45.0	113
5.5	42	15.5	60	25.5	78	35.5	96	45.5	114
6.0	43	16.0	61	26.0	79	36.0	97	46.0	115
6.5	44	16.5	62	26.5	80	36.5	98	46.5	116
7.0	45	17.0	63	27.0	81	37.0	99	47.0	117
7.5	45	17.5	63	27.5	81	37.5	99	47.5	117
8.0	46	18.0	64	28.0	82	38.0	100	48.0	118
8.5	47	18.5	65	28.5	83	38.5	101	48.5	119
9.0	48	19.0	66	29.0	84	39.0	102	49.0	120
9.5	49	19.5	67	29.5	85	39.5	103	49.5	121

*°C = 5/9 (°F - 32) or °F = 9/5 (°C) + 32.

Solutes

The methods of collecting and analyzing water samples to determine the kinds and concentrations of solutes are described by Brown, Skougstad, and Fishman (1970). If the mixture of solutes throughout the stream cross section is homogeneous, one sample can adequately define the water quality at a given time. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge depending on the source of material and the turbulence and mixing of the stream. Some sites must be sampled at several vertical intervals across the channel to determine the solute load accurately.

At chemical-quality stations where monitors are installed, the records consists of daily maximum, minimum, and mean values for each constituent measured. More detailed records (hourly values) may be obtained from the district office.

Water temperature

Water temperatures are measured at most of the water-quality stations. The water temperatures for daily stations are taken when a sample is collected, at about the same time each day. Large streams have small diurnal temperature changes; shallow streams may have a daily range of several degrees and may closely follow the changes in air temperature. Some streams may be affected by waste-heat discharges. At stations where continuously recording thermographs are used maximum and minimum temperatures for each day are published.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section or a single sample at a fixed point and a coefficient applied to determine concentration in the cross sections.

During periods of rapidly changing flow or concentration, samples may have been collected twice daily or, in some instances, hourly. The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided day method. For periods when no samples were collected, daily discharges of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment discharges observed for other periods of similar discharge. A blank in the daily mean concentration column of the suspended-sediment discharge table indicates the value in the sediment discharge column was estimated.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions at the times of observations only, such data are useful in establishing seasonal relations between quality and streamflow for predicting long-term sediment-discharge characteristics of the stream.

In addition to records of the quantities of suspended sediment, records of periodic measurements of particle-size distribution of suspended sediment and bed material are included.

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of Data

The observation-well program in Oregon, begun in 1928, was continued through 1979 in cooperation with the Oregon Water Resources Department. During the period 1962-65, the number of wells in the observation-well network was increased from 102 to 840. Observation wells in the program are part of a basic national network for providing a historical record of water-level changes in selected aquifers in the nation. Most of the wells are measured periodically by personnel of the Oregon Water Resources Department. Measurements are made in most of the wells three or four times a year to obtain records of the effects of pumping and seasonal changes in ground-water storage. The measurements are generally made in winter and spring before pumping begins, during the pumping season, and at the end of the pumping season. Water-level measurements in 81 representative wells in the Oregon observation-well network are included in this report; the locations of these wells are shown in figure 5.

Each well is identified by means of a 15-digit number that is based on the grid system of latitude and longitude. The first six digits represent degrees, minutes, and seconds of north latitude; the next seven digits are degrees, minutes, and seconds, of west longitude; and the last two numbers are sequential numbers assigned in the order the wells are inventoried in a 1-second quadrangle. Each well is also identified by a local well number that provides continuity with older reports and local needs.

Well Descriptions

For each well, the well description includes, if available, the following information: Latitude-longitude number, local well number, owner, method of construction, use of well, aquifer name or lithology, diameter of casing, depth of well, depth interval perforated or screened, altitude of land surface datum (lsd) National Geodetic Vertical Datum of 1929 (NGVD), and a description of the measuring point.

The depth of the well at the time it was inventoried is given in the well description, and any subsequent changes also are described. Well diameter reported is the inside of the innermost well casing at land surface.

Water Levels

Measurements are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well ensure that measurements at each well are of consistent accuracy and reliability.

Water-level measurements in this report are given in feet below land-surface datum unless otherwise indicated. Those water levels that are above land-surface datum are preceded by a plus (+) sign. Land-surface datum is a datum plane that is approximately at land surface at each well. The height of the measuring point (MP) above or below land-surface datum is given in each well description.

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error of determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water, the accuracy is greater. Most measurements are reported to a hundredth of a foot; others are reported only to a tenth of a foot or a larger unit. Water levels determined by air line are less accurate than those measured by other methods; therefore, these water levels are reported only to the nearest half a foot.

The highest and lowest water levels measured at each well for the period of record are reported. These are intended to represent static water levels, but the lowest levels reported for some wells may reflect recent pumping.

Hydrographs

Hydrographs show fluctuations of water levels during 1956-79 in 15 selected observations wells. Generally, water levels are highest during the wet winter and spring months and lowest during the dry summer and autumn months. Water levels are shown on the hydrographs in feet below the land surface at the well.

Well-Numbering System

Local designations of wells discussed in this report are based on the official system for the rectangular subdivision of public lands, referenced to the Willamette base line and meridian. The number indicates the location of the well, by township, range, section, and its position within the section. A graphic illustration of this method of well numbering is shown below. The numbers indicate the township, the range, and the section, respectively, in which the well is located. The letters following the section number locate the well within the section. The first letter denotes the quarter section (160 acres); the second, the quarter-quarter section (40 acres); and the third, the quarter-quarter-quarter section (10 acres). Where two or more wells are in the same 10-acre subdivision, serial numbers are added after the third letter. The section number and three-letter position indicator are shown on the location map adjacent to the well symbol. Within a county, the wells are arranged in sequential order based on increasing numbers for township and range and are shown on the map (fig. 5) by section number. For example, well 27S/18E-21aaa is in the NE¼NE¼NE¼ sec.21, T.27 S., R.18 E., in Lake County, and will be labeled as 21AAA.

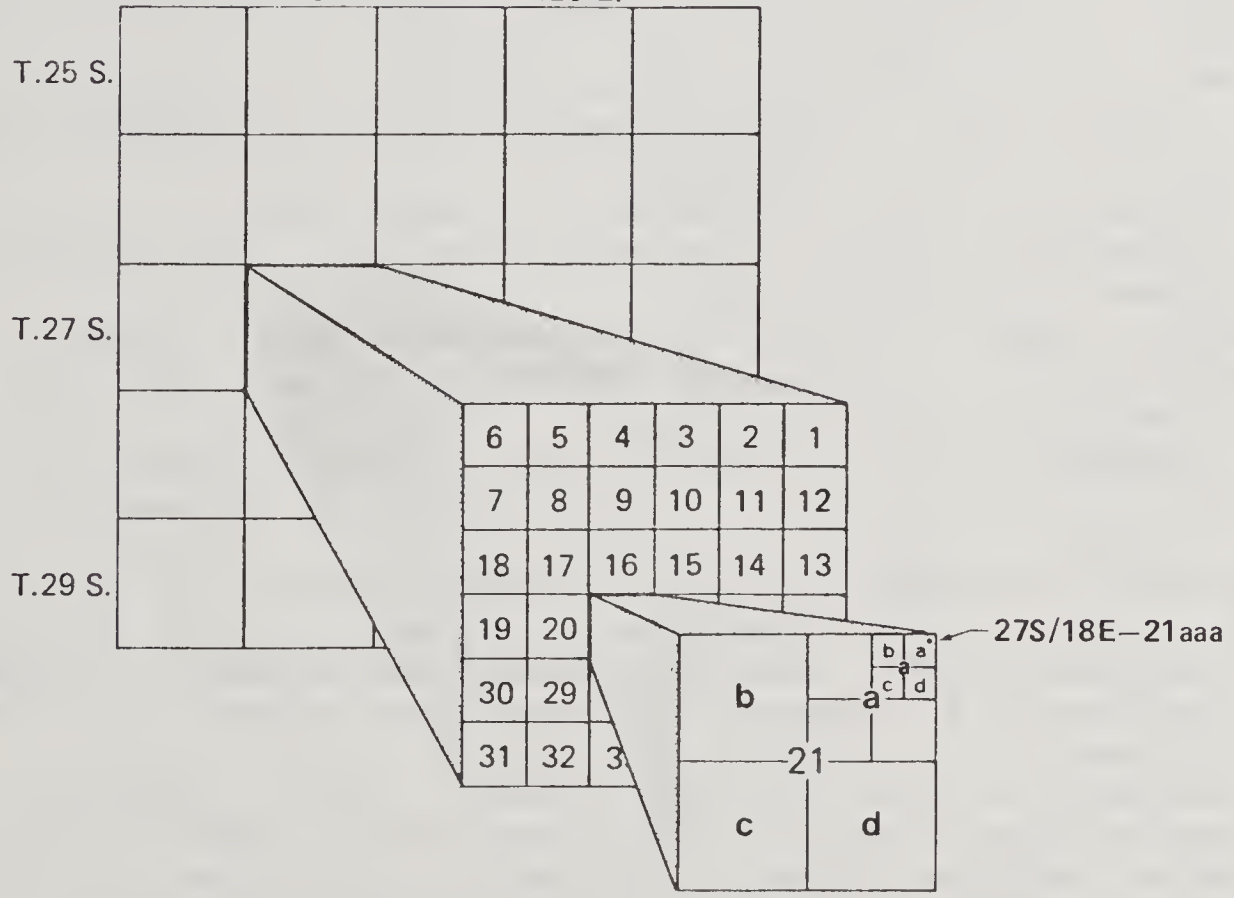

Figure 1.--Local identifier well-numbering system.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

Thirty-five manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The manuals listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 1200 South Eads Street, Arlington, VA 22202 (authorized agent of the Superintendent of Documents, Government Printing Office).

Prices are subject to change. Customers should verify prices with the USGS Branch of Distribution, phone (202) 751-6777 before placing orders. Prices include cost of domestic surface transportation. For transmittal outside the U.S.A. (except to Canada and Mexico) a surcharge of 25 percent of the net bill should be included to cover surface transportation.

NOTE: When ordering any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations".

1-D1. WATER TEMPERATURE-INFLUENTIAL FACTORS, FIELD MEASUREMENT, AND DATA PRESENTATION, by H.H. Stevens, Jr., J.F. Ficke, and G.F. Smoot: USGS--TWRI, Book 1, Chapter D1. 1975. 65 pages.

1-D2. GUIDELINES FOR COLLECTION AND FIELD ANALYSIS OF GROUND-WATER SAMPLES FOR SELECTED UNSTABLE CONSTITUENTS, by W.W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.

2-D1. APPLICATION OF SURFACE GEOPHYSICS TO GROUND-WATER INVESTIGATIONS, by A.A.R. Zohdy, G.P. Eaton, and D.R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.

2-E1. APPLICATION OF BOREHOLE GEOPHYSICS TO WATER-RESOURCES INVESTIGATIONS, by W.S. Keys and L.M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.

3-A1. GENERAL FIELD AND OFFICE PROCEDURES FOR INDIRECT DISCHARGE MEASUREMENTS, by M.A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.

3-A2. MEASUREMENT OF PEAK DISCHARGE BY THE SLOPE-AREA METHOD, by Tate Dalrymple and M.A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.

3-A3. MEASUREMENT OF PEAK DISCHARGE AT CULVERTS BY INDIRECT METHODS, by G.L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.

3-A4. MEASUREMENT OF PEAK DISCHARGE AT WIDTH CONTRACTIONS BY INDIRECT METHODS, by H.F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.

3-A5. MEASUREMENT OF PEAK DISCHARGE AT DAMS BY INDIRECT METHODS, by Harry Hulsing: USGS-TWRI Book 3, Chapter A5. 1967. 29 pages.

3-A6. GENERAL PROCEDURE FOR GAGING STREAMS, by R.W. Carter and Jacob Davidian: USGS.-TWRI Book 3, Chapter A6, 1968. 13 pages.

3-A7. STAGE MEASUREMENTS AT GAGING STATIONS, by T.J. Buchanan and W.P. Somers: USGS-TWRI Book 3, Chapter A7. 1968. 28 pages.

3-A8. DISCHARGE MEASUREMENTS AT GAGING STATIONS, by T.J. Buchanan and W.P. Somers: USGS-TWRI Book 3, Chapter A8. 1969. 65 pages.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

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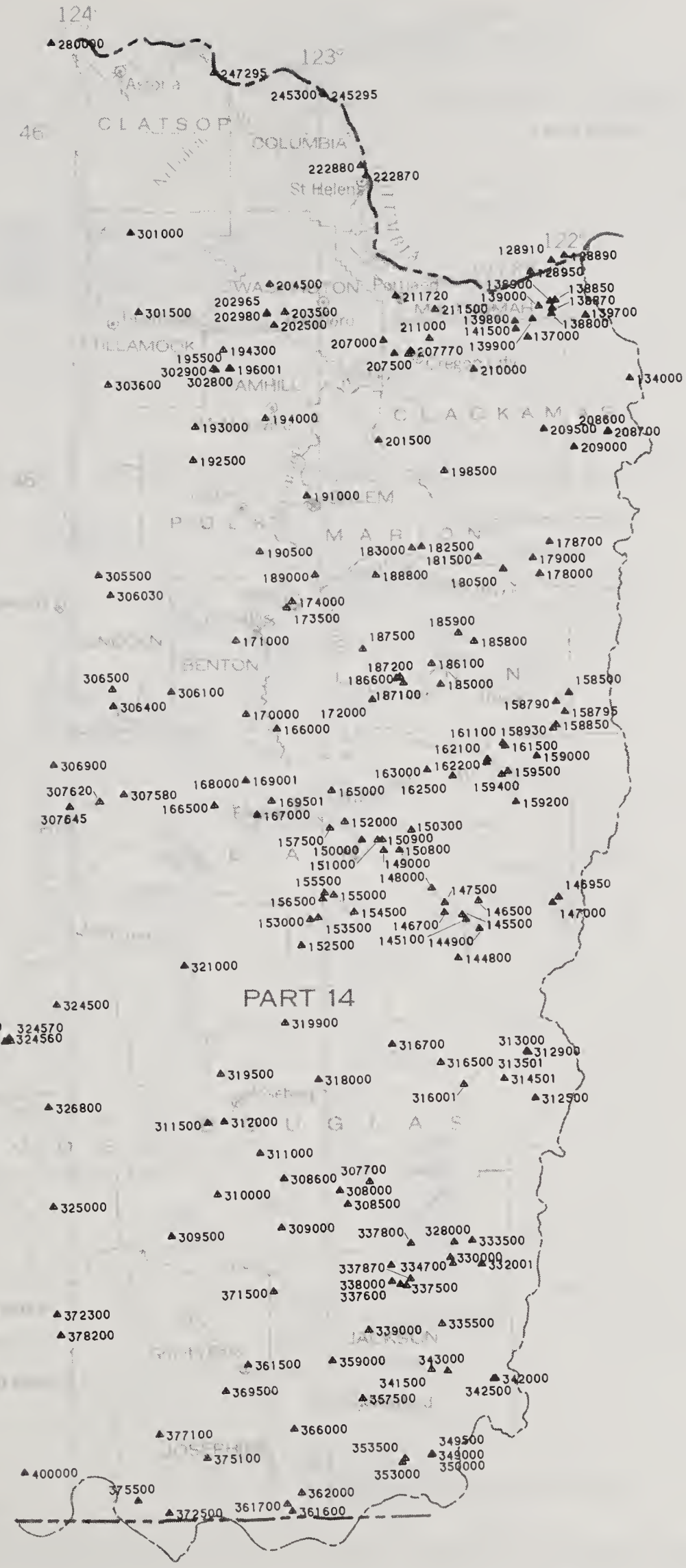


Figure 2. -- Map of Western Oregon showing location of active gaging stations

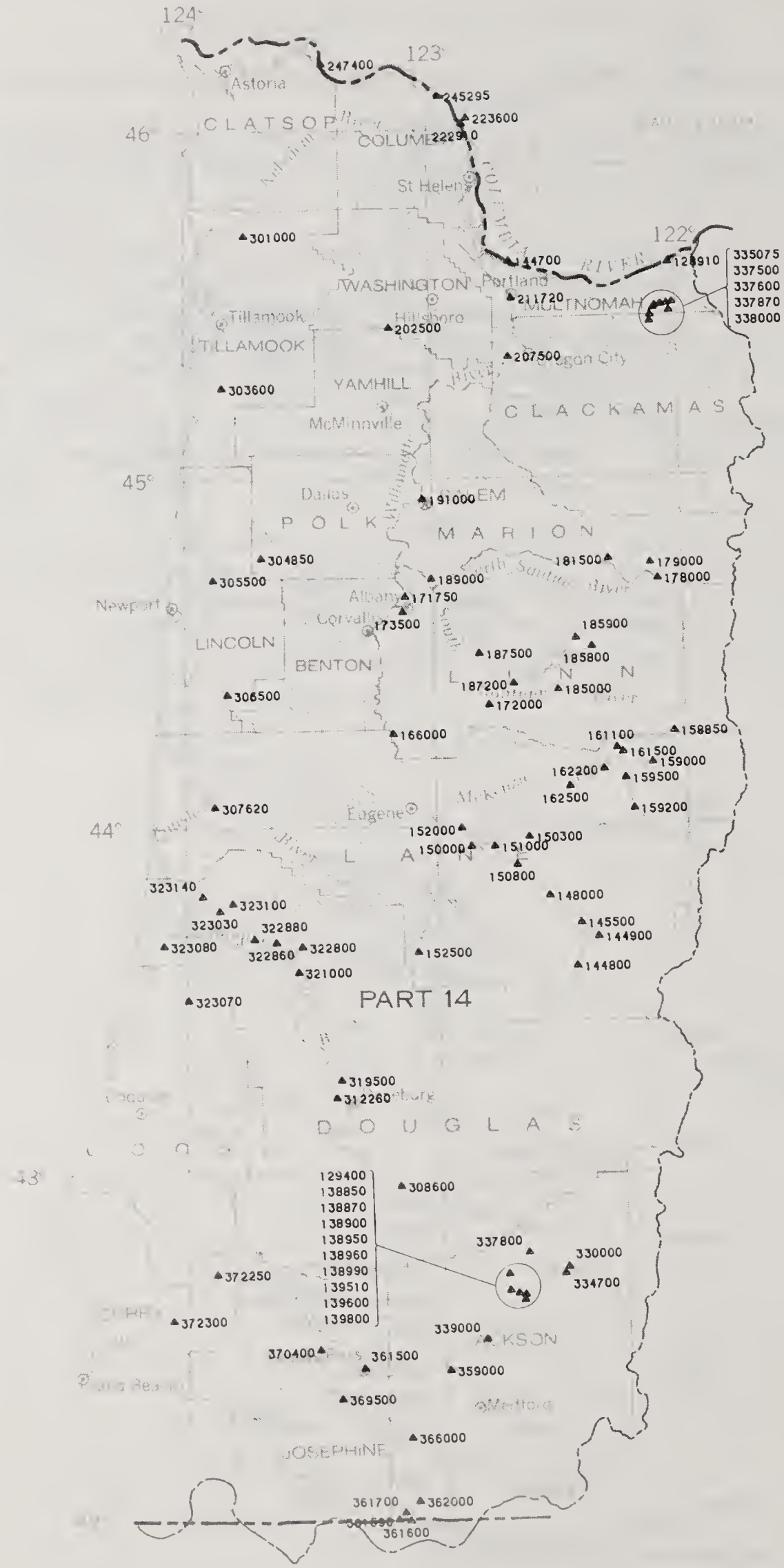


Figure 3. -- Map of Western Oregon showing sites where water-quality data are obtained

14128910 COLUMBIA RIVER AT WARRENDALE, OR
(National stream-quality accounting network station)

LOCATION.--Lat 45°36'45", long 122°01'35", in NE¼SE¼ sec.35, T.2 N., R.6 E., Multnomah County, Hydrologic Unit 17080001, on left bank 0.1 mi (0.2 km) downstream from Tumult Creek, 1.0 mi (1.6 km) west of Warrendale, 5.1 mi (9.2 km) downstream from Bonneville Dam, and at mile 141.0 (226.9 km).

DRAINAGE AREA.--240,000 mi² (621,600 km²), approximately.

WATER-STAGE RECORDS

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Flow regulated by many reservoirs upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height recorded, 30.91 ft (9.421 m) June 20, 1972; minimum, 4.49 ft (1.369 m) July 10, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 20.21 ft (6.160 m) June 19; minimum, 4.93 ft (1.503 m) Oct. 1.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	7.38	4.93	6.17	8.40	7.66	8.03	11.13	9.13	9.75	---	---	---
2	7.66	6.13	6.95	9.27	7.60	8.28	11.44	10.25	10.68	---	---	---
3	8.01	6.05	7.03	10.46	8.70	9.43	10.20	9.99	10.45	---	---	---
4	8.92	7.60	8.41	10.62	9.57	10.00	12.10	10.82	11.06	---	---	---
5	9.04	8.12	8.60	10.37	9.51	9.97	13.50	11.52	12.07	---	---	---
6	9.40	8.21	8.76	10.02	9.19	9.58	---	---	---	---	---	---
7	9.35	6.53	8.12	9.91	8.95	9.48	---	---	---	---	---	---
8	9.40	7.82	8.63	9.87	9.38	9.64	---	---	---	---	---	---
9	8.64	7.14	7.85	9.85	9.20	9.48	---	---	---	---	---	---
10	8.94	6.69	7.79	9.66	9.08	9.41	---	---	---	---	---	---
11	8.96	8.08	8.45	9.12	8.40	8.77	---	---	---	---	---	---
12	8.65	5.65	6.76	8.64	8.11	8.43	---	---	---	---	---	---
13	6.71	5.56	6.09	8.14	7.50	7.86	---	---	---	---	---	---
14	7.74	5.54	6.68	7.60	6.91	7.36	---	---	---	---	---	---
15	7.84	6.40	7.21	7.73	6.62	7.26	---	---	---	---	---	---
16	8.27	6.54	7.67	9.19	7.58	8.37	---	---	---	---	---	---
17	7.40	5.96	6.87	10.12	8.75	9.42	---	---	---	---	---	---
18	8.47	6.55	7.63	10.06	9.36	9.71	---	---	---	---	---	---
19	9.20	7.73	8.62	9.77	8.81	9.41	---	---	---	---	---	---
20	9.20	8.23	8.67	9.52	8.48	8.92	---	---	---	---	---	---
21	8.87	8.17	8.63	10.85	7.88	8.61	---	---	---	---	---	---
22	9.55	8.01	8.72	11.33	10.16	10.72	---	---	---	---	---	---
23	9.23	8.48	8.81	10.93	9.79	10.22	---	---	---	---	---	---
24	8.94	7.77	8.32	10.19	9.50	9.79	---	---	---	---	---	---
25	9.69	8.41	8.93	10.22	9.66	9.93	---	---	---	---	---	---
26	9.46	8.31	8.76	10.26	9.58	9.93	---	---	---	---	---	---
27	8.91	8.31	8.59	10.50	9.10	9.69	---	---	---	---	---	---
28	8.92	8.25	8.55	10.92	8.95	9.82	---	---	---	---	---	---
29	8.74	8.01	8.47	10.05	9.39	9.60	---	---	---	14.10	13.10	13.75
30	8.31	7.73	8.07	11.09	9.39	10.17	---	---	---	13.99	11.25	12.97
31	8.41	7.02	7.88	---	---	---	---	---	---	12.47	9.77	11.02
MONTH	9.69	4.93	7.96	11.33	6.62	9.24	13.50	9.13	10.80	14.10	9.77	12.58

14128910 COLUMBIA RIVER AT WARRENDALE, OR--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	12.27	11.28	11.55	12.05	10.65	11.06	9.86	9.48	9.24	17.56	15.68	16.51
2	11.58	10.20	10.50	11.35	10.08	10.55	9.72	9.13	9.39	---	---	---
3	10.99	10.38	10.73	10.57	9.95	10.25	9.60	8.96	9.29	---	---	---
4	10.98	10.03	10.51	13.04	9.94	11.39	9.84	9.14	9.50	---	---	---
5	10.08	9.20	9.51	13.73	13.00	13.42	10.22	9.05	9.70	---	---	---
6	10.65	9.50	10.10	13.72	12.31	12.76	9.73	8.95	9.35	---	---	---
7	10.75	9.81	10.28	13.12	12.21	12.59	9.15	8.18	8.83	---	---	---
8	10.78	9.25	10.05	12.23	9.91	10.99	10.68	8.20	9.41	---	---	---
9	11.08	9.65	10.60	10.00	9.37	9.76	11.52	10.71	11.25	---	---	---
10	9.65	8.77	9.11	9.97	9.37	9.61	12.09	10.96	11.56	---	---	---
11	9.01	8.56	8.61	12.11	9.36	10.45	12.62	10.57	12.07	---	---	---
12	11.25	8.56	9.87	14.22	11.25	12.39	10.50	9.15	9.64	---	---	---
13	12.23	10.98	11.58	14.56	13.92	14.24	9.65	8.62	9.17	---	---	---
14	12.90	11.25	11.77	14.20	13.00	13.59	10.08	8.15	9.40	---	---	---
15	14.07	12.85	13.25	14.20	11.35	12.12	10.32	9.39	9.85	---	---	---
16	12.95	9.47	10.53	11.45	10.97	11.19	12.69	9.42	11.17	---	---	---
17	10.31	8.98	9.49	13.30	10.84	11.33	12.71	10.57	11.67	---	---	---
18	11.16	9.60	10.16	12.90	11.89	12.20	12.72	10.28	11.51	---	---	---
19	11.22	10.28	10.83	12.50	10.99	11.53	12.88	10.16	11.43	---	---	---
20	11.35	10.45	10.82	11.30	10.56	10.95	10.77	9.90	10.39	---	---	---
21	12.62	10.08	11.43	11.04	10.37	10.72	12.85	10.23	10.85	---	---	---
22	13.51	12.08	12.84	10.52	9.88	10.26	14.19	12.08	12.91	---	---	---
23	12.08	9.35	10.37	10.12	9.70	9.90	14.90	13.43	14.00	---	---	---
24	9.50	8.70	9.14	9.93	9.37	9.67	15.45	14.45	15.03	---	---	---
25	9.45	8.75	9.02	9.61	8.55	9.30	15.45	13.02	14.51	---	---	---
26	10.50	8.67	9.35	9.55	7.30	8.41	13.00	11.90	12.42	---	---	---
27	13.56	10.50	11.73	9.57	8.77	9.16	12.32	10.32	11.15	---	---	---
28	13.05	11.87	12.05	9.31	8.49	8.94	13.69	11.26	12.36	16.64	16.46	16.57
29	12.85	11.45	11.75	9.75	8.70	9.33	16.01	13.71	14.47	16.90	16.55	16.75
30	---	---	---	9.65	9.19	9.47	17.56	16.06	17.09	18.76	16.70	17.84
31	---	---	---	9.75	9.05	9.51	---	---	---	18.67	18.14	18.52
MONTH	14.07	8.56	10.60	14.56	7.30	10.87	17.56	8.15	11.29	18.76	15.68	17.24
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	18.10	17.51	17.80	14.97	13.05	14.07	9.84	9.17	9.55	8.77	7.91	8.35
2	17.88	17.52	17.74	13.04	10.45	11.81	9.73	6.91	8.18	8.95	7.88	8.49
3	18.60	16.85	17.84	11.35	10.68	11.15	9.00	6.46	7.59	7.80	6.80	7.25
4	18.49	16.33	17.51	11.63	10.00	11.06	9.07	7.94	8.77	7.88	6.89	7.29
5	18.02	16.45	17.17	11.24	10.01	10.62	9.62	8.75	9.31	7.56	6.52	7.16
6	17.28	16.22	16.78	12.95	11.24	12.39	9.69	8.89	9.28	7.65	6.46	7.13
7	17.81	16.37	17.14	13.34	12.61	12.94	9.66	8.84	9.26	7.86	6.08	7.18
8	18.06	17.73	17.93	12.82	12.47	12.59	9.77	8.40	9.05	7.75	6.75	7.33
9	19.12	17.99	18.33	13.16	12.40	12.70	8.36	6.84	7.62	8.35	7.25	7.70
10	19.05	17.67	18.36	12.85	11.99	12.31	8.04	6.44	7.33	8.11	6.98	7.62
11	17.86	17.48	17.67	13.37	12.40	12.83	9.69	7.44	8.58	7.98	6.89	7.45
12	18.01	17.82	17.92	12.40	9.82	10.97	10.54	9.23	9.91	7.79	6.71	7.25
13	18.15	17.89	18.01	10.12	9.39	9.79	9.93	8.50	9.18	7.74	6.01	6.73
14	18.46	18.11	18.25	10.28	9.52	9.94	9.32	6.98	7.98	7.10	5.53	6.11
15	18.19	16.88	17.50	12.02	9.37	10.43	7.72	6.44	7.01	7.05	5.47	6.22
16	18.07	16.87	17.72	12.32	10.48	11.31	8.00	6.91	7.51	7.75	6.15	6.98
17	19.28	17.81	18.55	10.52	9.18	9.97	7.82	6.58	7.30	7.92	7.36	7.63
18	20.19	18.79	19.46	9.78	9.30	9.70	8.37	7.10	7.65	8.10	7.47	7.79
19	20.21	19.49	19.85	9.98	8.76	9.34	8.77	7.30	8.52	8.18	7.56	7.87
20	19.60	16.55	18.41	9.80	8.80	9.55	9.03	7.92	8.41	8.15	7.21	7.64
21	17.89	16.05	16.94	11.12	8.81	9.80	8.96	7.59	8.43	8.05	6.60	7.23
22	17.47	16.32	16.64	12.03	10.65	11.14	8.35	6.39	7.68	7.70	6.24	7.24
23	17.59	16.75	17.25	11.12	10.06	10.54	7.37	5.93	6.79	7.97	6.44	7.41
24	17.67	17.36	17.49	10.51	9.77	10.10	7.44	6.19	6.96	8.02	7.01	7.51
25	18.16	17.13	17.55	10.06	9.12	9.53	7.99	6.04	7.20	8.27	6.69	7.28
26	17.79	17.45	17.64	9.77	8.88	9.31	8.95	7.67	8.35	9.39	7.51	8.27
27	17.67	16.28	16.92	9.82	7.98	8.79	9.27	8.14	8.69	9.34	8.04	8.60
28	16.28	13.24	---	9.22	7.62	8.26	9.00	8.15	8.58	9.22	8.00	8.48
29	13.23	12.15	12.58	9.29	7.63	8.48	8.82	7.80	8.43	9.19	7.25	8.23
30	13.78	11.85	12.59	10.03	9.00	9.47	8.83	7.86	8.35	8.38	7.68	7.97
31	---	---	---	9.96	9.26	9.58	8.81	7.91	8.34	---	---	---
MONTH	20.21	11.85	17.43	14.97	7.62	10.66	10.54	5.93	8.25	9.39	5.47	7.51
YEAR	20.21	4.93	10.53									

14128910 COLUMBIA RIVER AT WARRENDALE, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1975 to current year.
WATER TEMPERATURES: October 1975 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 242 micromhos May 15, 1977; minimum, 97 micromhos June 26, 27, 1978.
WATER TEMPERATURES: Maximum, 22.5°C Aug. 17, 18, 1977, Aug. 11, 1980; minimum recorded, 0.0°C many days in January and February, 1979.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 208 micromhos Mar. 15, 16; minimum, 120 micromhos June 8.
WATER TEMPERATURES: Maximum recorded, 22.5°C Aug. 11; minimum, 1.0°C Jan. 31, Feb. 3, 4, 12.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	DIS-CHARGE, IN CUBIC FEET PER SECOND	TEMPER-ATURE (DEG C)	PH (UNITS)	OXYGEN, DIS-SOLVED (MG/L)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	SILICA, DIS-SOLVED (MG/L AS SIO2)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT												
24...	0900	114000	15.9	7.2	9.5	159	K1	K6	7.1	19	5.0	6.6
NOV												
19...	1200	127000	10.7	7.6	10.9	188	K2	K2	8.6	19	5.4	8.4
DEC												
05...	1300	156000	7.8	7.8	10.7	175	21	--	10	20	5.4	8.3
JAN												
21...	1200	151000	2.6	6.7	13.6	160	K2	K2	12	18	5.0	5.8
FEB												
08...	1200	151000	2.0	7.4	12.9	182	K11	K10	11	20	6.2	9.5
APR												
24...	1200	232000	10.4	7.6	11.3	178	K4	K1	13	19	5.6	6.6
MAY												
15...	1200	219000	13.5	7.5	10.8	144	K4	K1	11	14	4.4	5.8
JUN												
09...	1100	288000	14.2	7.6	12.1	119	K3	K1	9.1	13	3.4	4.3
JUL												
18...	1100	146000	18.4	8.0	9.4	130	K2	<0	6.6	16	4.0	4.5
AUG												
14...	1100	106000	20.2	8.0	8.5	146	<0	K3	5.8	18	4.5	4.9
SEP												
26...	1130	116000	9.5	8.1	9.5	162	K2	K2	7.8	19	4.8	5.4

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
OCT												
24...	1.4	57	17	3.2	.2	.43	.17	.41	.040	.15	.60	.020
NOV												
19...	1.5	69	19	4.2	.2	.35	.32	.45	.010	.33	.79	.030
DEC												
05...	1.4	66	13	2.9	.2	.41	.32	.43	.030	.33	.79	.020
JAN												
21...	1.3	62	14	3.2	.2	.50	.36	.86	.020	.32	1.2	.040
FEB												
08...	1.4	68	21	4.9	.2	.53	.36	.56	.080	.33	.97	.030
APR												
24...	1.4	65	14	3.2	.2	.41	.33	.46	.040	.34	.84	.030
MAY												
15...	1.2	48	12	2.9	.2	.37	.09	.36	.020	.10	.48	.030
JUN												
09...	1.0	42	9.9	3.6	.1	.33	.08	.41	.020	.10	.53	.010
JUL												
18...	1.0	50	8.9	2.2	.3	.39	.00	.58	.000	.00	.58	.010
AUG												
14...	1.1	57	16	2.3	.2	.12	.00	.19	.000	.00	.19	.020
SEP												
26...	1.3	69	8.4	3.1	.2	.45	.17	.55	.000	.23	.78	.030

14128910 COLUMBIA RIVER AT WARRENDALE, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	CARBON, ORGANIC TOTAL (MG/L AS C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	TUR-BID-ITY (NTU)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT												
24...	.040	4.8	.1	--	68	11	92	95	2.8	7	2160	95
NOV												
19...	.040	--	--	8.2	70	1	100	109	1.7	7	2400	96
DEC												
05...	.060	--	--	3.3	72	6	106	102	3.3	11	4630	86
JAN												
21...	.090	3.3	.6	--	66	4	109	98	25	33	13500	98
FEB												
08...	.040	--	--	1.7	75	7	115	117	7.8	29	11800	92
APR												
24...	.060	4.7	--	--	71	6	105	104	6.5	25	15700	87
MAY												
15...	.030	--	--	4.9	53	5	77	81	8.7	20	11800	93
JUN												
09...	.040	--	--	3.5	46	4	76	70	8.8	34	26400	89
JUL												
18...	.040	2.8	--	--	56	6	76	74	2.2	10	3940	81
AUG												
14...	.030	--	--	3.2	63	6	82	87	2.7	10	2860	65
SEP												
26...	.040	--	--	4.7	67	0	102	92	2.7	--	--	--

DATE	IRON, DIS-SOLVED (UG/L AS FE)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	ARSENIC DIS-SOLVED (UG/L AS AS)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)
OCT										
24...	20	240	2	30	2	2	30	300	5	2
JAN										
21...	10	2200	1	50	2	2	30	200	<1	3
APR										
24...	30	670	2	30	2	2	30	100	<1	1
JUL										
18...	<10	290	<1	10	2	2	20	<100	<1	0

DATE	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	SILVER, DIS-SOLVED (UG/L AS AG)
OCT									
24...	0	0	<3	0	2	10	0	9	0
JAN									
21...	10	10	<3	2	0	17	0	6	0
APR									
24...	0	0	<3	0	5	11	1	4	0
JUL									
18...	0	10	<3	0	2	6	0	4	0

DATE	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SELE-NIUM, TOTAL (UG/L AS SE)	MERCURY DIS-SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, DIS-SOLVED (UG/L AS NI)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)
OCT									
24...	0	10	10	0	0	--	--	1	4
JAN									
21...	0	9	30	0	0	--	--	2	5
APR									
24...	0	5	50	0	0	.2	.2	1	4
JUL									
18...	0	4	50	0	0	.0	.1	3	3

14128910 COLUMBIA RIVER AT WARRENDALE, OR--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO AUGUST 1980

DATE	NOV 19,79	APR 24,80	MAY 15,80	JUN 9,80	JUL 18,80	AUG 14,80
TIME	1200	1200	1200	1100	1100	1100
TOTAL CELLS/ML	460	4400	7900	5400	1700	2700
DIVERSITY: DIVISION	0.7	0.4	0.8	0.7	1.2	1.0
.CLASS	0.7	0.4	0.8	0.7	1.2	1.0
..ORDER	1.3	1.3	1.2	1.5	1.9	1.8
...FAMILY	1.5	1.7	1.3	1.5	2.3	1.9
....GENUS	0.0	2.4	1.6	2.0	2.5	2.5

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...CHARACIACEAE												
....SCHROEDERIA	--	-	--	-	--	-	*	0	--	-	--	-
...MICRACTINIACEAE												
....GOLENKINIA	--	-	--	-	--	-	*	0	--	-	--	-
...OOCYSTACEAE												
....ANKISTRODESMUS	14	3	81	2	80	1	*	0	77	5	--	-
....CHODATELLA	--	-	--	-	40	1	--	-	--	-	26	1
....SELENASTRUM	--	-	--	-	--	-	--	-	--	-	90	3
....TETRAEDRON	--	-	--	-	--	-	--	-	--	-	*	0
...SCENEDESMACEAE												
....SCENEDESMUS	--	-	81	2	80	1	--	-	26	2	--	-
....TETRASTRUM	--	-	--	-	80	1	--	-	--	-	--	-
..VOLVOCALES												
...CHLAMYDOMONADACEAE												
....CHLAMYDOMONAS	--	-	--	-	--	-	*	0	--	-	*	0
CHRYSOPHYTA												
.BACILLARIOPHYCEAE												
..CENTRALES												
...COSCINODISCACEAE	14	3	--	-	--	-	--	-	--	-	--	-
....CYCLOTELLA	110#	25	830#	19	140	2	39	1	13	1	100	4
....MELOSIRA	130#	28	650	15	220	3	1600#	30	680#	40	1200#	46
....STEPHANODISCUS	57	13	420	10	340	4	90	2	39	2	--	-
..PENNALES												
...DIATOMACEAE												
....DIATOMA	--	-	260	6	--	-	--	-	--	-	--	-
...FRAGILARIACEAE												
....ASTERIONELLA	14	3	1900#	43	5900#	74	2400#	45	350#	20	260	9
....FRAGILARIA	--	-	--	-	--	-	340	6	--	-	480#	17
....SYNEDRA	14	3	81	2	100	1	*	0	26	2	39	1
...GOMPHONEMATACEAE												
....GOMPHONEMA	--	-	--	-	*	0	--	-	--	-	--	-
...NAVICULACEAE												
....NAVICULA	--	-	--	-	--	-	--	-	26	2	*	0
...NITZSCHIACEAE												
....NITZSCHIA	43	9	--	-	*	0	--	-	--	-	--	-
...SURIRELLACEAE												
....SURIRELLA	--	-	*	0	--	-	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)												
.CRYPTOPHYCEAE												
..CRYPTOMONADALES												
...CRYPTOCHRYSIDACEAE												
....CHROOMONAS	--	-	*	0	80	1	--	-	--	-	26	1
...CRYPTOMONADACEAE												
....CRYPTOMONAS	--	-	--	-	--	-	--	-	13	1	26	1
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..CHROOCOCCALES												
...CHROOCOCCACEAE												
....ANACYSTIS	57	13	81	2	*	0	--	-	26	2	39	1
..HORMOGONALES												
...NOSTOCACEAE												
....ANABAENA	--	-	--	-	--	-	--	-	230	14	360	13
...OSCILLATORIACEAE												
....OSCILLATORIA	--	-	--	-	800	10	770	14	210	12	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

14128910 COLUMBIA RIVER AT WARRENDALE, OR--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	151	156	186	192	180	168	179	185	134	133	---	156
2	150	158	172	188	174	167	180	190	134	133	---	156
3	151	161	171	186	171	165	183	189	134	132	---	---
4	153	161	170	187	173	164	184	184	133	131	---	---
5	154	158	175	187	179	172	185	184	132	129	---	---
6	155	158	180	190	182	180	187	184	129	130	142	---
7	154	158	180	190	180	190	185	180	127	126	146	---
8	154	163	180	185	180	197	185	173	124	127	148	---
9	155	169	182	177	180	201	184	163	124	129	---	---
10	155	173	183	180	181	199	182	156	125	131	---	---
11	157	176	184	185	185	199	183	150	127	131	---	---
12	160	179	187	176	188	200	180	148	130	136	148	---
13	160	182	190	165	193	201	177	147	132	141	151	---
14	161	189	191	159	194	204	176	148	134	139	---	---
15	161	194	192	161	192	206	173	146	134	132	---	---
16	162	194	191	162	190	206	172	144	136	133	---	---
17	161	188	188	167	187	204	175	143	136	137	---	---
18	159	186	188	169	184	202	176	143	135	136	---	153
19	158	185	189	171	186	201	177	143	137	137	147	154
20	157	181	192	172	186	201	177	141	139	137	151	---
21	156	177	195	170	185	203	176	141	140	133	151	---
22	158	178	198	171	182	204	175	141	143	132	---	---
23	158	177	200	173	180	204	177	140	144	135	---	---
24	159	176	201	174	180	203	181	139	143	137	---	---
25	158	173	202	177	178	200	180	138	141	137	---	---
26	160	170	200	179	175	198	174	134	138	138	152	---
27	160	171	199	179	170	194	169	133	136	139	154	---
28	159	177	198	177	167	191	165	133	137	141	158	---
29	159	187	198	178	167	189	167	134	136	---	157	---
30	159	190	198	182	---	185	175	134	135	---	157	---
31	157	---	197	183	---	181	---	134	---	---	155	---
MEAN	157	175	189	177	181	193	178	153	134	134	151	155

14128910 COLUMBIA RIVER AT WARRENDALE, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	19.0	18.5	14.0	13.5	8.0	8.0	6.0	6.0	1.5	1.5	4.5	4.5
2	19.0	18.5	13.5	13.5	8.0	7.5	6.0	6.0	1.5	1.5	5.0	4.5
3	18.5	18.0	13.5	13.0	8.0	8.0	6.0	6.0	1.5	1.0	5.0	4.5
4	18.5	18.5	13.5	13.5	8.0	8.0	6.0	5.5	2.0	1.0	5.0	5.0
5	19.0	18.5	13.5	13.0	8.0	7.5	6.0	5.5	2.0	2.0	5.0	5.0
6	19.0	18.5	13.5	13.0	8.0	8.0	5.5	5.5	2.0	1.5	5.5	5.0
7	18.5	18.5	13.0	13.0	8.0	7.5	5.5	5.0	2.0	1.5	5.5	5.0
8	18.5	18.0	13.0	12.5	8.0	7.5	5.0	4.0	2.0	2.0	5.5	5.0
9	18.5	18.0	13.0	12.5	8.0	7.5	4.0	4.0	2.0	2.0	6.0	5.5
10	18.0	17.5	13.0	12.5	8.0	7.5	4.0	4.0	2.0	2.0	6.0	6.0
11	18.0	17.5	12.5	12.0	7.5	7.0	4.0	4.0	2.0	2.0	6.0	6.0
12	18.0	18.0	12.0	11.5	7.5	7.0	4.0	4.0	2.0	1.0	6.0	6.0
13	18.0	18.0	11.5	11.5	7.5	7.0	4.5	4.0	2.0	2.0	6.0	6.0
14	18.0	17.5	11.5	11.0	7.5	7.0	4.5	4.5	2.0	1.5	6.0	6.0
15	17.5	17.5	11.0	10.5	7.5	7.5	4.5	4.5	2.0	1.5	6.0	6.0
16	17.5	17.5	10.5	10.5	7.5	6.5	4.5	4.5	2.0	2.0	6.5	6.0
17	17.5	17.0	11.0	10.5	7.0	6.5	4.5	4.0	2.5	2.0	6.5	6.5
18	17.5	17.0	11.0	11.0	7.0	7.0	4.5	4.0	2.5	2.5	7.0	6.5
19	17.0	16.5	11.0	10.5	7.0	7.0	4.0	3.5	3.0	2.5	7.0	6.5
20	16.5	16.5	11.0	10.5	7.0	7.0	3.5	3.0	3.0	3.0	7.0	6.5
21	16.5	16.0	10.5	10.0	7.0	7.0	3.5	3.0	3.5	3.0	7.0	6.5
22	16.0	15.5	10.0	9.5	7.0	6.5	3.0	3.0	3.5	3.0	7.0	7.0
23	16.0	15.5	9.5	9.5	7.0	6.5	3.0	3.0	3.5	3.0	7.5	7.0
24	16.0	15.5	9.5	9.5	6.5	6.5	3.5	3.0	3.5	3.5	7.5	7.0
25	15.5	15.5	9.5	9.5	6.5	6.5	3.0	3.0	3.5	3.5	7.5	7.0
26	15.5	15.5	9.5	9.0	6.5	6.5	3.0	2.5	4.0	3.5	7.5	7.5
27	15.5	15.5	9.0	8.5	6.5	6.0	2.5	2.0	4.0	4.0	7.5	7.5
28	15.5	15.0	8.5	8.0	6.0	6.0	2.5	2.0	4.5	4.0	7.5	7.5
29	15.0	14.5	8.0	8.0	6.0	6.0	2.0	1.5	4.5	4.0	7.5	7.5
30	15.0	14.5	8.0	8.0	6.0	6.0	2.0	1.5	---	---	7.5	7.5
31	14.5	14.0	---	---	6.0	6.0	1.5	1.0	---	---	8.0	7.0
MONTH	19.0	14.0	14.0	8.0	8.0	6.0	6.0	1.0	4.5	1.0	8.0	4.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.0	7.0	12.0	12.0	14.0	13.5	17.5	17.0	21.5	20.5	19.0	18.5
2	8.0	7.5	12.5	12.0	14.0	13.5	17.5	17.0	20.5	20.0	19.0	18.5
3	8.0	7.5	13.0	12.5	14.0	13.5	17.0	17.0	20.5	20.0	---	---
4	8.0	7.5	13.5	12.5	14.5	14.0	17.0	17.0	20.5	20.5	---	---
5	8.0	8.0	13.5	13.0	14.5	14.0	17.0	16.5	20.5	20.0	---	---
6	8.0	8.0	13.5	13.5	14.5	14.0	17.5	17.0	21.5	20.5	---	---
7	8.5	8.0	13.5	13.5	14.0	14.0	17.5	17.0	21.5	21.0	---	---
8	8.5	8.0	13.5	13.5	14.0	14.0	18.0	17.5	22.0	21.5	---	---
9	8.5	8.5	13.5	13.5	14.0	14.0	18.0	17.5	---	---	---	---
10	8.5	8.0	13.5	13.0	14.5	14.0	18.0	18.0	---	---	---	---
11	9.0	8.5	13.5	13.0	14.5	14.0	18.0	18.0	22.5	22.0	---	---
12	9.0	8.5	13.5	13.5	14.5	14.5	18.0	18.0	22.0	22.0	---	---
13	9.0	8.5	14.0	13.5	14.5	14.5	18.5	18.0	22.0	21.5	---	---
14	9.0	9.0	14.0	13.5	14.5	14.5	18.0	18.0	21.5	---	---	---
15	9.5	8.5	13.5	13.5	15.5	14.5	18.5	18.0	---	---	---	---
16	9.5	9.0	13.5	13.5	15.5	15.5	18.5	18.5	---	---	---	---
17	10.0	9.5	13.5	13.5	15.5	15.5	18.5	18.5	---	---	19.0	18.0
18	9.5	9.0	14.0	13.5	15.5	15.5	18.5	18.5	---	---	18.5	17.5
19	9.5	9.5	14.0	13.5	16.0	15.5	19.0	18.5	20.5	20.0	18.0	18.0
20	10.0	9.5	14.0	14.0	16.0	15.5	19.0	18.5	21.0	20.5	18.0	17.5
21	10.0	9.5	14.5	14.0	16.5	16.0	19.5	19.0	21.0	20.0	---	---
22	10.0	9.5	14.0	14.0	16.5	16.5	20.0	19.5	21.0	20.0	---	---
23	10.5	10.0	14.5	14.0	17.0	16.5	20.0	19.5	---	---	---	---
24	10.5	10.5	14.0	13.5	17.0	17.0	20.0	19.5	---	---	---	---
25	11.0	10.5	13.5	13.5	17.0	17.0	20.0	19.5	---	---	---	---
26	11.5	10.5	13.5	13.5	17.0	16.5	20.0	19.5	21.0	20.0	17.5	16.5
27	12.0	11.0	13.5	13.0	17.0	16.5	20.5	20.0	20.0	19.5	17.5	17.5
28	12.0	11.5	14.0	13.0	17.0	16.5	20.5	20.5	19.5	19.0	17.5	17.5
29	12.0	12.0	14.0	13.5	17.0	16.5	20.5	20.5	19.5	19.0	18.0	17.5
30	12.0	12.0	14.0	13.5	17.0	17.0	20.5	20.5	19.0	19.0	18.0	17.5
31	---	---	14.0	13.5	---	---	20.5	20.5	19.0	18.5	---	---
MONTH	12.0	7.0	14.5	12.0	17.0	13.5	20.5	16.5	22.5	18.5	19.0	16.5

14128950 COLUMBIA RIVER AT MULTNOMAH FALLS, OR

LOCATION.--Lat 45°34'45", long 122°06'55", in SW¼SE¼ sec.7, T.1 N., R.6 E., Multnomah County, Hydrologic Unit 17080001, on left bank at Multnomah Falls, 0.7 mi (1.1 km) upstream from mouth of Multnomah Creek, 2.1 mi (3.4 km) downstream from Oneonta Creek, and at mile 136.2 (219.1 km).

DRAINAGE AREA.--240,000 mi² (621,600 km²), approximately.

PERIOD OF RECORD.--November 1971 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Flow regulated by many reservoirs upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height recorded, 31.11 ft (9.482 m) June 19, 20, 1972; minimum, 4.47 ft (1.362 m) July 10, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 20.60 ft (6.279 m) June 19; minimum recorded, 4.92 ft (1.500 m) Oct. 1.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	7.23	4.92	6.10	8.35	7.60	7.99	11.29	9.23	10.06	10.67	9.63	10.16
2	7.60	6.11	6.90	9.19	7.59	8.23	11.61	10.41	10.96	11.14	8.97	10.04
3	8.00	6.11	7.12	10.39	8.67	9.37	11.35	10.17	10.81	10.97	10.39	10.67
4	8.87	7.57	8.37	10.53	9.55	9.94	12.25	11.00	11.39	10.72	10.01	10.29
5	8.94	8.08	8.55	10.35	9.50	9.94	13.64	11.78	12.39	11.97	10.25	11.10
6	9.33	8.16'	8.70	10.05	9.20	9.57	13.72	13.24	13.48	11.85	10.63	10.98
7	9.37	6.56	8.06	9.85	9.18	9.47	13.57	11.60	12.29	13.72	10.52	11.98
8	9.38	7.83	8.64	9.83	9.38	9.59	11.59	10.65	11.01	13.58	11.58	12.51
9	8.89	7.11	7.87	9.77	9.14	9.41	10.71	10.18	10.43	15.43	12.68	13.80
10	8.85	6.60	7.71	9.49	9.05	9.31	10.78	9.99	10.34	15.52	14.51	14.81
11	8.87	7.98	8.36	9.06	8.39	8.73	11.47	9.93	10.64	14.51	13.27	13.75
12	8.69	5.60	6.79	8.60	8.11	8.39	12.14	10.90	11.31	14.03	13.19	13.63
13	6.64	5.48	6.04	8.09	7.67	7.92	12.46	11.57	11.89	14.88	13.82	14.36
14	7.63	5.46	6.60	8.05	7.11	7.58	12.58	11.44	11.78	17.00	14.86	15.93
15	7.79	6.39	7.14	7.84	6.87	7.47	12.68	9.42	10.99	17.01	16.80	16.92
16	8.15	6.74	7.62	9.36	7.68	8.52	9.42	8.54	8.96	17.10	16.63	16.85
17	7.32	5.96	6.80	10.21	8.76	9.47	11.16	8.71	9.81	---	---	---
18	8.38	6.50	7.53	10.20	9.45	9.79	11.54	10.28	10.76	---	---	---
19	9.03	7.59	8.51	9.86	8.97	9.49	13.06	10.64	11.73	---	---	---
20	9.11	8.23	8.62	9.61	8.66	9.10	13.14	11.27	11.93	---	---	---
21	8.83	8.11	8.58	10.85	7.96	8.78	12.53	11.50	11.91	---	---	---
22	9.45	8.11	8.66	11.44	10.23	10.80	11.97	11.00	11.40	12.30	11.49	11.87
23	9.19	8.42	8.76	10.94	9.76	10.24	11.32	9.82	10.42	12.69	12.15	12.41
24	8.99	7.71	8.31	10.18	9.48	9.80	11.80	11.14	11.41	12.55	11.35	11.91
25	9.55	8.38	8.82	10.25	9.72	9.97	11.43	10.91	11.21	11.38	10.12	10.82
26	9.29	8.26	8.70	10.26	9.61	9.95	10.98	10.32	10.73	13.61	9.41	11.21
27	8.83	8.23	8.50	11.05	9.23	10.01	10.31	9.09	9.69	13.71	10.14	11.67
28	8.79	8.14	8.47	11.50	9.26	10.09	9.82	8.94	9.30	13.31	10.01	11.27
29	8.62	7.96	8.40	10.27	9.52	9.80	9.76	8.84	9.16	14.27	13.25	13.91
30	8.23	7.68	8.02	11.22	9.66	10.39	9.68	8.48	9.05	14.19	11.33	13.21
31	8.34	7.02	7.82	---	---	---	10.69	9.20	9.77	12.66	9.84	11.25
MONTH	9.55	4.92	7.91	11.50	6.87	9.30	13.72	8.48	10.87	17.10	8.97	12.59

14128950 COLUMBIA RIVER AT MULTNOMAH FALLS, OR--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	12.38	11.43	11.78	12.40	11.00	11.48	10.11	9.51	9.76	17.84	15.98	16.76
2	11.51	10.32	10.66	11.70	10.42	10.85	9.95	9.39	9.65	17.37	16.43	16.61
3	10.99	10.40	10.73	10.87	10.26	10.58	9.88	9.20	9.55	18.04	15.23	16.71
4	10.97	10.09	10.55	13.29	10.11	11.61	10.10	9.39	9.75	15.24	14.45	14.73
5	10.13	9.32	9.58	14.01	13.30	13.71	10.36	9.35	9.90	15.35	14.52	15.07
6	10.60	9.65	10.12	14.00	12.49	13.04	9.95	9.19	9.58	16.69	15.28	16.11
7	10.72	9.84	10.28	13.28	12.42	12.81	9.42	8.47	9.10	17.88	16.62	17.51
8	11.04	9.31	10.23	12.54	10.14	11.21	10.97	8.49	9.68	18.03	17.83	17.93
9	11.29	9.72	10.79	10.21	9.62	9.98	11.72	10.96	11.47	17.99	17.16	17.64
10	9.75	8.73	9.22	10.18	9.61	9.83	12.41	11.24	11.82	17.75	16.84	17.41
11	9.20	8.63	8.87	12.31	9.57	10.64	12.93	10.94	12.39	17.11	16.70	16.83
12	11.44	8.77	10.10	14.40	11.54	12.58	10.81	9.48	9.93	17.36	16.40	16.99
13	12.48	11.18	11.79	14.67	14.19	14.41	9.98	8.97	9.48	16.41	16.05	16.20
14	13.16	11.54	12.14	14.55	13.41	13.88	10.31	8.50	9.69	---	---	---
15	14.38	13.14	13.65	14.59	11.81	12.53	10.63	9.63	10.13	---	---	---
16	13.09	9.62	10.76	11.78	11.37	11.58	12.97	9.94	11.44	---	---	---
17	10.66	9.29	9.90	13.56	11.16	11.73	12.96	10.86	11.99	---	---	---
18	11.53	9.99	10.67	13.15	12.15	12.55	12.96	10.54	11.75	---	---	---
19	11.59	10.66	11.21	12.75	11.30	11.90	13.04	10.40	11.73	---	---	---
20	11.67	10.80	11.17	11.56	10.85	11.22	11.01	10.42	10.69	---	---	---
21	12.84	10.34	11.84	11.29	10.63	10.98	13.06	10.55	12.13	---	---	---
22	13.79	12.37	13.20	10.76	10.17	10.50	14.40	12.39	13.16	16.60	14.74	15.55
23	12.36	9.63	10.80	10.31	9.89	10.14	15.13	13.76	14.32	17.69	14.93	16.25
24	9.78	9.10	9.42	10.16	9.69	9.95	15.71	14.74	15.23	17.95	16.78	17.64
25	9.70	9.10	9.34	9.86	8.94	9.59	15.71	13.38	14.88	16.74	15.06	15.65
26	10.76	8.87	9.65	9.76	7.54	8.68	13.33	12.29	12.74	16.08	14.62	15.47
27	13.83	10.75	12.14	9.81	9.11	9.46	12.67	10.67	11.38	16.87	14.70	15.45
28	13.51	12.20	12.46	9.64	8.82	9.23	13.93	11.51	12.64	17.09	16.27	16.76
29	13.15	11.78	12.22	9.99	9.01	9.56	16.28	13.92	14.69	17.11	16.84	16.99
30	---	---	---	9.85	9.50	9.68	17.86	16.35	17.36	18.99	17.01	18.11
31	---	---	---	10.01	9.35	9.74	---	---	---	18.90	18.40	18.78
MONTH	14.38	8.63	10.87	14.67	7.54	11.15	17.86	8.47	11.60	18.99	14.45	16.66

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	18.38	17.75	18.02	15.31	13.40	14.39	---	---	---	9.31	8.36	8.85
2	18.11	17.84	17.99	13.37	10.79	12.10	---	---	---	9.44	8.36	8.98
3	18.88	17.12	18.11	11.72	10.96	11.46	---	---	---	8.44	7.31	7.77
4	18.76	16.64	17.76	12.00	10.35	11.42	---	---	---	---	---	---
5	18.26	16.71	17.42	11.62	10.34	11.00	---	---	---	---	---	---
6	17.51	16.49	17.04	13.40	11.55	12.62	---	---	---	---	---	---
7	18.02	16.65	17.41	13.76	12.93	13.35	---	---	---	---	---	---
8	18.28	18.01	18.19	13.19	12.81	13.00	---	---	---	---	---	---
9	19.36	18.21	18.58	13.52	12.73	13.11	---	---	---	---	---	---
10	19.29	17.91	18.61	13.21	12.32	12.75	---	---	---	8.55	7.50	8.05
11	18.12	17.70	17.91	13.72	12.76	13.19	---	---	---	8.54	7.40	7.95
12	18.23	18.06	18.14	12.76	10.22	11.35	---	---	---	---	---	---
13	18.43	18.09	18.22	10.46	9.78	10.09	---	---	---	---	---	---
14	18.85	18.40	18.56	10.62	9.85	10.24	---	---	---	---	---	---
15	18.60	17.35	17.97	12.41	9.73	10.69	---	---	---	---	---	---
16	18.47	17.36	18.14	12.75	10.58	11.76	8.65	7.40	8.00	---	---	---
17	19.67	18.28	18.98	10.82	9.41	10.14	8.28	7.12	7.78	---	---	---
18	20.55	19.13	19.82	10.11	9.59	9.84	8.78	7.58	8.10	---	---	---
19	20.60	19.86	20.22	10.37	9.01	9.60	9.14	7.70	8.97	---	---	---
20	19.90	16.93	18.78	10.16	9.01	9.79	9.45	8.40	8.82	---	---	---
21	18.21	16.42	17.31	11.49	9.07	10.18	9.35	8.00	8.95	---	---	---
22	17.82	16.73	17.03	12.36	10.85	11.47	8.75	6.88	8.15	---	---	---
23	18.11	17.02	17.75	---	---	---	7.78	6.45	7.30	---	---	---
24	18.18	17.61	17.96	---	---	---	7.88	6.75	7.44	---	---	---
25	18.45	17.57	17.84	---	---	---	8.50	6.59	7.68	---	---	---
26	18.15	17.67	17.93	---	---	---	9.40	8.07	8.85	---	---	---
27	18.00	16.57	17.26	---	---	---	9.70	8.65	9.25	---	---	---
28	16.63	13.58	14.79	---	---	---	9.48	8.73	9.10	---	---	---
29	13.57	12.49	12.89	---	---	---	9.34	8.44	8.94	---	---	---
30	14.10	12.21	12.96	---	---	---	9.38	8.38	8.86	---	---	---
31	---	---	---	---	---	---	9.34	8.35	8.85	---	---	---
MONTH	20.60	12.21	17.65	15.31	9.01	11.52	9.70	6.45	8.44	9.44	7.31	8.32
YEAR	20.60	4.92	11.65									

14129400 COLUMBIA RIVER AT WASHOUGAL, WA

LOCATION.--Lat 45°34'30", long 122°21'10", in SE¼ sec.18, T.1 N., R.4 E., Clark County, Hydrologic Unit 17080001, on right bank on rock-fill point at south end of 17th Street, in Washougal, and at river mile 122.9 (197.7 km).

DRAINAGE AREA.--240,000 mi² (622,600 km²), approximately.

PERIOD OF RECORD.--October 1971 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Flow regulated by many reservoirs upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum recorded gage height, 28.87 ft (8.800 m) June 19, 1972; minimum, 3.68 ft (1.122 m) July 10, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum recorded gage height, 16.72 ft (5.096 m) May 31; minimum recorded, 4.43 ft (1.350 m) Sept. 15.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	7.63	6.67	7.17	9.87	8.24	9.02			
2	6.65	5.59	6.07	8.40	6.86	7.54	10.58	9.14	9.77			
3	7.02	5.84	6.38	9.40	7.78	8.53	10.32	9.30	9.96			
4	7.89	6.43	7.31	9.55	8.46	8.91	11.22	9.78	10.36			
5	7.93	6.94	7.46	9.49	8.55	8.97	12.20	10.74	11.19			
6	8.32	6.96	7.63	9.16	8.23	8.72	12.36	11.84	12.10			
7	8.22	6.05	7.12	9.00	8.19	8.59	12.31	10.44	11.09			
8	8.29	6.77	7.53	8.84	8.16	8.47	10.43	9.44	9.79			
9	7.90	6.15	7.03	8.71	7.87	8.18	9.50	8.81	9.09			
10	7.77	5.69	6.76	8.22	7.71	7.99	9.27	8.56	8.91			
11	7.73	6.60	7.16	8.07	7.45	7.72	9.67	8.30	8.99			
12	7.59	4.82	5.92	7.84	7.35	7.58	10.19	9.33	9.61			
13	5.75	4.46	5.14	7.42	6.92	7.22	10.57	9.89	10.17			
14	6.39	4.45	5.59	7.13	6.70	6.93	10.62	9.62	10.04			
15	6.61	5.51	6.05	7.14	6.35	6.82	10.80	8.88	9.75			
16	6.97	5.88	6.52	8.10	6.70	7.37	8.87	8.12	8.44			
17	6.48	5.37	5.84	8.87	7.43	8.10	9.70	7.92	8.69			
18	7.42	5.54	6.53	8.85	8.02	8.38	10.28	9.03	9.55			
19	8.09	6.47	7.50	8.56	7.64	8.15	11.53	9.35	10.32			
20	8.21	7.21	7.68	8.32	7.67	8.01	11.66	10.07	10.62			
21	8.05	7.28	7.64	9.55	7.37	7.93	11.19	10.26	10.65			
22	8.53	7.09	7.73	10.02	9.11	9.66	10.70	9.81	10.14			
23	8.46	7.37	7.86	9.61	8.60	9.01	10.18	9.08	9.55			
24	8.19	7.14	7.66	9.17	8.32	8.68	10.56	9.81	10.13			
25	8.56	7.26	7.83	9.00	8.40	8.71	10.18	9.57	9.82			
26	8.47	7.26	7.71	9.03	8.47	8.70	---	---	---			
27	7.89	7.12	7.47	9.72	8.54	8.98	---	---	---			
28	7.81	6.96	7.35	10.07	8.66	9.26	---	---	---			
29	7.55	6.92	7.23	9.11	8.61	8.90	---	---	---			
30	7.34	6.66	7.04	9.95	8.56	9.14	---	---	---			
31	7.31	6.30	6.94	---	---	---	---	---	---			
MONTH	8.56	4.45	6.99	10.07	6.35	8.28	12.36	7.92	9.91			

14129400 COLUMBIA RIVER AT WASHOUGAL, WA--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1				---	---	---	8.34	7.70	8.06	---	---	---
2				---	---	---	8.33	7.71	7.99	---	---	---
3				---	---	---	8.29	7.55	7.92	---	---	---
4				---	---	---	8.53	7.61	8.07	---	---	---
5				---	---	---	8.69	7.80	8.26	---	---	---
6				---	---	---	8.48	7.64	8.03	---	---	---
7				---	---	---	7.95	7.03	7.56	15.52	14.31	15.08
8				---	---	---	9.02	6.99	7.95	15.69	15.44	15.56
9				---	---	---	10.06	9.06	9.62	15.67	15.06	15.37
10				---	---	---	10.46	9.47	9.99	15.49	14.65	15.18
11				9.99	7.96	8.76	11.31	9.68	10.77	14.83	14.51	14.61
12				11.84	9.59	10.42	9.61	8.09	8.77	15.12	14.26	14.82
13				12.74	11.84	12.40	---	---	---	14.26	13.93	14.07
14				12.41	11.65	12.03	---	---	---	13.95	12.91	13.29
15				12.43	10.22	11.02	---	---	---	14.03	12.54	13.00
16				10.32	9.80	10.07	---	---	---	13.78	12.43	12.96
17				11.63	9.55	10.18	---	---	---	14.22	13.50	13.84
18				11.57	10.54	10.94	---	---	---	13.75	13.02	13.48
19				11.01	9.82	10.37	---	---	---	13.84	12.46	13.05
20				10.04	9.32	9.68	---	---	---	12.76	11.30	12.03
21				9.77	9.09	9.40	---	---	---	12.87	11.91	12.35
22				9.15	8.55	8.85	---	---	---	14.16	12.40	13.24
23				8.73	8.17	8.47	---	---	---	15.29	12.93	13.90
24				8.43	7.99	8.22	---	---	---	15.67	14.64	15.32
25				8.26	7.28	7.98	---	---	---	14.63	13.02	13.59
26				7.98	6.23	7.15	---	---	---	14.02	12.61	13.33
27				8.07	7.55	7.76	---	---	---	14.40	12.90	13.41
28				7.88	7.25	7.55	---	---	---	14.81	14.24	14.55
29				8.47	7.21	7.86	---	---	---	14.99	14.51	14.81
30				8.21	7.72	7.97	---	---	---	16.59	14.72	15.74
31				8.39	7.67	8.05	---	---	---	16.72	16.20	16.47
MONTH				12.74	6.23	9.29	11.31	6.99	8.58	16.72	11.30	14.12

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	16.17	15.64	15.81	13.15	11.62	12.31	8.57	7.73	8.16	7.81	6.61	7.12
2	15.96	15.61	15.74	11.62	9.38	10.39	8.49	5.77	7.08	7.65	6.65	7.19
3	16.62	15.10	15.87	9.92	9.34	9.61	7.69	5.35	6.48	7.13	5.70	6.21
4	16.30	14.58	15.45	10.17	8.78	9.67	7.80	6.89	7.36	6.81	5.64	6.22
5	16.01	14.60	15.29	9.62	8.81	9.18	8.21	7.38	7.86	6.43	5.64	6.13
6	15.11	14.34	14.80	11.21	9.66	10.55	8.29	7.44	7.89	6.82	5.33	6.20
7	---	---	---	11.68	10.82	11.28	8.37	7.44	7.95	6.90	5.51	6.35
8	---	---	---	11.30	10.69	10.98	8.46	7.23	7.79	6.79	5.88	6.40
9	---	---	---	11.32	10.66	11.05	7.31	5.93	6.70	7.43	6.13	6.76
10	---	---	---	11.13	10.41	10.80	7.07	5.73	6.49	7.14	6.04	6.64
11	---	---	---	11.77	10.64	11.16	8.36	6.23	7.33	6.92	5.95	6.48
12	---	---	---	10.79	8.61	9.68	8.91	7.66	8.45	6.71	5.64	6.23
13	---	---	---	8.87	8.14	8.46	8.63	7.08	7.93	6.70	5.07	5.83
14	---	---	---	8.95	8.04	8.52	7.96	5.96	6.94	6.18	4.67	5.39
15	---	---	---	10.24	8.06	8.78	6.71	5.31	5.99	6.22	4.43	5.31
16	---	---	---	10.45	9.08	9.94	7.03	5.63	6.30	6.80	5.05	5.82
17	---	---	---	9.24	7.88	8.56	7.02	5.60	6.15	6.86	6.08	6.37
18	---	---	---	8.40	7.94	8.11	7.21	5.87	6.48	6.94	6.21	6.50
19	---	---	---	8.56	7.35	7.89	7.31	6.61	7.09	6.96	6.27	6.60
20	---	---	---	8.30	7.61	8.01	7.74	6.52	7.07	7.06	6.05	6.52
21	---	---	---	9.21	7.54	8.36	7.61	6.28	7.12	6.81	5.62	6.26
22	---	---	---	10.29	9.07	9.52	7.10	5.51	6.54	6.64	5.67	6.26
23	---	---	---	9.58	8.46	8.99	6.28	5.32	5.86	7.01	5.63	6.45
24	---	---	---	8.99	8.17	8.63	6.58	5.39	6.07	7.03	5.94	6.55
25	---	---	---	8.70	7.69	8.21	6.81	5.37	6.25	7.43	5.92	6.66
26	---	---	---	8.40	7.48	8.01	7.73	6.33	7.19	8.37	6.59	7.36
27	---	---	---	8.53	7.00	7.68	8.10	6.87	7.56	8.30	6.80	7.55
28	14.55	11.77	12.99	7.97	6.50	7.24	7.90	6.95	7.45	8.18	6.79	7.42
29	11.75	10.66	11.10	7.97	6.62	7.33	7.87	6.80	7.31	8.10	6.27	7.20
30	11.81	10.35	10.98	8.56	7.49	8.12	7.80	6.60	7.21	7.42	6.40	6.82
31	---	---	---	8.58	7.80	8.23	7.82	6.63	7.18	---	---	---
MONTH	16.62	10.35	14.23	13.15	6.50	9.20	8.91	5.31	7.07	8.37	4.43	6.49
YEAR	16.72	4.43	8.95									

14134000 SALMON RIVER NEAR GOVERNMENT CAMP, OR

LOCATION.--Lat 45°15'55", long 121°43'00", in SE¼NW¼ sec.31, T.3 S., R.9 E., Clackamas County, Hydrologic Unit 17080001, in Mount Hood National Forest, on right bank near lower end of Red Top Meadows and 3.0 mi (4.8 km) southeast of Government Camp.

DRAINAGE AREA.--8.00 mi^2 (20.7 km^2).

PERIOD OF RECORD.--May 1910 to May 1912, April 1926 to current year. Published as "near Rowe" 1910-12.

REVISED RECORDS.--WSP 1398: 1911-12, 1926-27, 1933(M), 1949. WDR OR-77-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3,445.53 ft (1,050.198 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 21, 1910, nonrecording gage at site 0.2 mi (0.3 km) upstream at different datum. Nov. 21, 1910, to May 31, 1912, and Apr. 21, 1926, to Sept. 30, 1933, at site 75 ft (23 m) upstream from former site at different datums. Oct. 1, 1933, to Sept. 30, 1960, at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records excellent. No regulation or diversion above station.

AVERAGE DISCHARGE.--55 years (water years 1911, 1927-80), 44.5 ft^3/s (1.260 m^3/s), 75.54 in/yr (1,919 mm/yr), 32,240 acre-ft/yr (39.8 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,300 ft^3/s (36.8 m^3/s) Dec. 23, 1964, gage height, 4.75 ft (1.448 m), from rating curve extended above 310 ft^3/s (8.78 m^3/s), on basis of slope-area measurement of peak flow; minimum, 10 ft^3/s (0.28 m^3/s) Nov. 27, 1952.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 119 ft^3/s (3.37 m^3/s) Dec. 4, gage height, 2.04 ft (0.622 m), no peak above base of 150 ft^3/s (4.25 m^3/s); minimum, 14 ft^3/s (0.40 m^3/s) Oct. 9-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	22	18	40	40	48	27	81	71	41	28	22
2	17	22	52	36	52	46	27	79	72	41	28	31
3	17	21	40	35	59	45	27	75	64	40	28	21
4	17	29	79	38	51	59	29	84	57	39	27	20
5	18	26	50	46	44	51	36	90	54	39	27	20
6	16	22	41	34	46	45	32	81	53	38	25	21
7	17	20	40	31	42	44	28	75	56	38	25	21
8	17	19	37	26	41	43	31	72	54	38	26	19
9	16	18	52	25	38	42	42	70	54	39	25	20
10	16	18	53	26	36	40	36	66	52	39	25	20
11	16	17	40	28	36	42	35	66	50	37	25	20
12	15	17	37	79	35	38	40	68	52	36	25	19
13	15	17	37	82	33	37	48	66	79	35	24	19
14	17	17	42	103	33	36	54	63	59	36	24	19
15	19	17	60	73	33	33	57	60	55	36	23	18
16	17	25	45	60	33	32	56	58	54	35	23	18
17	17	27	42	57	33	33	58	60	52	34	23	18
18	32	23	47	49	37	33	61	60	50	33	28	20
19	44	19	47	44	42	33	67	61	49	33	23	20
20	33	18	47	42	43	34	72	60	49	33	22	33
21	30	18	48	39	36	31	69	59	48	33	21	26
22	31	20	41	37	34	31	61	59	46	34	20	19
23	33	20	38	36	32	31	67	54	47	33	20	19
24	37	23	37	35	34	29	72	55	48	30	20	19
25	37	21	34	34	37	29	67	74	53	30	20	17
26	32	19	33	34	54	29	73	89	48	30	20	17
27	34	18	31	32	54	28	83	72	46	30	23	17
28	29	17	30	31	58	28	86	61	44	30	21	18
29	31	17	29	31	52	30	84	57	43	29	20	18
30	29	18	29	30	---	28	74	56	42	28	21	19
31	27	---	28	30	---	28	---	56	---	29	26	---
TOTAL	744	605	1284	1323	1198	1136	1599	2087	1601	1076	736	608
MEAN	24.0	20.2	41.4	42.7	41.3	36.6	53.3	67.3	53.4	34.7	23.7	20.3
MAX	44	29	79	103	59	59	86	90	79	41	28	33
MIN	15	17	18	25	32	28	27	54	42	28	20	17
CFSM	3.00	2.53	5.18	5.34	5.16	4.58	6.66	8.41	6.68	4.34	2.96	2.54
IN.	3.46	2.81	5.97	6.15	5.57	5.28	7.43	9.70	7.44	5.00	3.42	2.83
AC-FT	1480	1200	2550	2620	2380	2250	3170	4140	3180	2130	1460	1210

CAL YR 1979 TOTAL 15038 MEAN 41.2 MAX 101 MIN 15 CFSM 5.15 IN 69.92 AC-FT 29830
WTR YR 1980 TOTAL 13997 MEAN 38.2 MAX 103 MIN 15 CFSM 4.78 IN 65.08 AC-FT 27760

14137000 SANOY RIVER NEAR MARMOT, OR

LOCATION.--Lat 45°23'30", long 122°07'40", in SE¼ sec.13, T.2 S., R.5 E., Clackamas County, Hydrologic Unit 17080001, on right bank 0.7 mi (1.1 km) southwest of Marmot, 0.8 mi (1.3 km) upstream from Sandy River Dam of Portland General Electric Co., 6.6 mi (10.6 km) downstream from Salmon River, and at mile 30.9 (49.7 km).

ORAINAGE AREA.--262 mi² (679 km²).

PERIOD OF RECORO.--August 1911 to current year. Published as "at Marmot" October 1912 to September 1913. Records for January 1916 to June 1919, published as "below dam, near Marmot," obtained by combining records for Sandy River below dam, near Marmot, with records for Sandy River Canal near Marmot.

REVISED RECORDS.--WSP 594: Drainage area. WSP 1288: 1912(M), 1915, 1922, 1924, 1934(M). WSP 1318: 1932(M).

GAGE.--Water-stage recorder. Altitude of gage is 730 ft (223 m), from river-profile map. Aug. 15, 1911, to Oec. 20, 1915, and July 2, 1919, to Oct. 19, 1933, nonrecording gage at site 1.0 mi (1.6 km) upstream at different datum. Oct. 20, 1933, to Sept. 30, 1958, water-stage recorder at site 0.6 mi (1.0 km) upstream at different datum.

REMARKS.--Records excellent. No regulation or diversion above station.

AVERAGE OISCHARGE.--69 years, 1,369 ft³/s (38.77 m³/s), 70.96 in/yr (1,802 mm/yr), 991,800 acre-ft/yr (1.22 km³/yr).

EXTREMES FOR PERIOO OF RECORO.--Maximum discharge, 61,400 ft³/s (1,740 m³/s) Oec. 22, 1964, gage height, 17.05 ft (5.197 m), from rating curve extended above 7,000 ft³/s (198 m³/s); minimum, 195 ft³/s (5.52 m³/s) Nov. 27, 28, 1952.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 7,700 ft³/s (218 m³/s) and maximum discharge, 12,000 ft³/s (340 m³/s) Jan. 14, gage height, 12.66 ft (3.859 m); minimum, 238 ft³/s (6.74 m³/s) Oct. 12, 13.

OISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

OAY	OCT	NOV	OEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	258	716	602	998	1630	2200	1140	1790	1490	709	436	352
2	258	621	3670	1050	2920	1920	1070	1770	2060	752	420	510
3	250	565	3070	1320	4170	1770	1090	1610	2090	745	410	390
4	254	608	5110	1230	3180	2140	1030	1650	1720	709	395	343
5	258	614	3940	2140	2600	2140	1360	1870	1470	681	390	334
6	266	553	2370	1720	3110	1870	1630	1660	1300	647	380	347
7	266	504	1800	1380	3610	1750	1400	1460	1270	653	366	347
8	266	470	1490	1310	2700	1730	1440	1370	1170	667	375	320
9	266	442	1470	1360	2140	1610	2340	1310	1090	660	375	306
10	258	426	2170	1180	1800	1550	2480	1320	1030	647	370	320
11	250	405	1560	1060	1580	1940	2090	1300	962	614	370	325
12	246	390	1460	4690	1430	1730	2010	1250	971	577	370	325
13	246	375	1310	8080	1320	1830	2510	1200	1830	565	366	320
14	279	361	1260	10700	1200	2080	2950	1150	1870	565	366	306
15	347	352	1550	6960	1110	1800	2970	1100	1580	571	356	292
16	293	410	1550	4810	1050	1550	2640	1030	1430	559	366	283
17	311	529	1430	4790	1040	1550	2650	980	1330	553	366	283
18	487	701	1490	3420	1160	1810	2500	971	1210	529	470	320
19	1130	595	1380	2640	1400	1380	2620	971	1120	523	390	366
20	1130	547	1310	2170	1670	1870	2750	962	1060	541	356	571
21	945	504	1490	1870	1490	1680	2930	998	1020	559	343	583
22	688	529	1580	1650	1370	1520	2350	1060	945	571	338	410
23	737	716	1370	1540	1330	1540	2140	980	927	535	334	361
24	667	945	1230	1400	1320	1420	2150	945	902	481	338	334
25	737	1220	1110	1300	1430	1310	2010	1300	1110	470	334	315
26	660	953	1020	1250	2470	1310	1960	2780	962	464	325	315
27	759	767	945	1200	2680	1300	2180	2560	885	470	334	315
28	797	667	877	1100	2860	1210	2470	1810	828	475	343	315
29	953	602	821	1050	2650	1290	2350	1480	805	458	311	306
30	852	583	782	1000	---	1290	1890	1290	774	426	311	347
31	885	---	759	1000	---	1230	---	1190	---	431	390	---
TOTAL	15999	17670	51976	77368	58420	51820	63100	43117	37211	17807	11394	10561
MEAN	516	589	1677	2496	2014	1672	2103	1391	1240	574	368	352
MAX	1130	1220	5110	10700	4170	2200	2970	2780	2090	752	470	583
MIN	246	352	602	998	1040	1210	1030	945	774	426	311	283
CFSM	1.97	2.25	6.40	9.53	7.69	6.38	8.03	5.31	4.73	2.19	1.41	1.34
IN.	2.27	2.51	7.38	10.99	8.29	7.36	8.96	6.12	5.28	2.53	1.62	1.50
AC-FT	31730	35050	103100	153500	115900	102800	125200	85520	73810	35320	22600	20950

CAL YR 1979 TOTAL 414705 MEAN 1136 MAX 9130 MIN 246 CFSM 4.34 IN 58.88 AC-FT 822600
WTR YR 1980 TOTAL 456443 MEAN 1247 MAX 10700 MIN 246 CFSM 4.76 IN 64.81 AC-FT 905400

14138800 BLAZED ALDER CREEK NEAR RHODDDENDRDN, DR

LDCATIDN.--Lat 45°27'10", long 121°53'25", in NW¼SE¼ sec.25, T.1 S., R.7 E., Clackamas County, Hydrologic Unit 17080001, in Mount Hood National Forest, on right bank 600 ft (183 m) below the confiuence of Bedrock and Hickman Creeks and 8.6 mi (13.8 km) north of Rhododendron.

DRAINAGE AREA.--8.17 mi² (21.16 km²).

PERIOD OF RECORD.--Dctober 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,540 ft (774 m), from topographic map.

REMARKS.--Records excellent. No regulation or diversion above station.

AVERAGE DISCHARGE.--17 years, 60.0 ft³/s (1.699 m³/s), 99.73 in/yr (2,533 mm/yr), 43,470 acre-ft/yr (53.6 hm³/yr).

EXTREMES FOR PERIOD DF RECORD.--Maximum discharge, 2,610 ft³/s (73.9 m³/s) Dec. 22, 1964, gage height, 8.25 ft (2.515 m), from rating curve extended above 330 ft³/s (9.35 m³/s), on basis of slope-area measurement of peak flow; minimum, 1.5 ft³/s (0.042 m³/s) Sept. 5-10, 28, 29, 1967.

EXTREMES FDR CURRENT YEAR.--Peak discharges above base of 500 ft³/s (14.2 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 2	0700	555	15.7	3.65	1.113	Jan. 13	1300	617	17.5	3.83	1.167
Dec. 4	0930	*739	20.9	*4.18	1.274						

Minimum, 2.0 ft³/s (0.057 m³/s) Dct. 9-13.

DISCHARGE, IN CUBIC FEET PER SECDND, WATER YEAR DCTDBER 1979 TD SEPTEMBER 1980
MEAN VALUES

DAY	DCT	NDV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	37	33	72	188	91	32	74	50	13	3.7	4.3
2	2.5	31	351	79	297	72	31	71	84	12	4.0	13
3	2.2	27	204	86	245	63	32	59	87	12	4.0	5.9
4	2.2	35	445	80	130	86	36	63	66	13	3.7	4.7
5	2.2	39	208	132	86	79	63	64	51	12	3.7	4.0
6	2.2	32	109	82	142	58	64	55	42	11	3.7	3.7
7	2.2	25	77	58	121	53	50	47	37	10	3.0	4.0
8	2.2	22	63	86	79	53	68	42	31	10	3.0	3.7
9	2.2	19	98	177	58	49	144	37	26	9.4	3.0	3.0
10	2.0	17	119	181	46	49	117	40	23	9.4	2.8	3.0
11	2.0	15	75	206	37	49	87	37	20	8.8	2.8	2.8
12	2.0	13	71	409	32	42	89	36	22	8.3	2.8	3.0
13	2.0	13	59	470	27	42	116	33	56	8.3	2.8	3.0
14	4.0	11	77	464	27	30	166	31	51	7.8	2.8	3.3
15	11	11	164	201	27	36	195	28	46	7.8	2.8	2.8
16	7.8	19	123	142	26	42	138	25	39	7.3	2.8	2.8
17	8.8	40	103	140	26	43	132	23	37	6.8	3.3	2.5
18	44	42	102	86	35	44	119	22	31	6.8	6.3	3.7
19	125	30	96	60	64	39	132	22	26	6.3	4.0	11
20	96	24	87	45	91	39	138	21	24	5.5	3.3	43
21	68	21	109	38	64	43	134	21	21	5.5	3.0	33
22	59	37	91	34	50	45	96	25	19	5.1	2.8	18
23	82	58	66	30	44	41	87	23	18	5.1	2.8	13
24	59	69	53	28	47	36	96	22	20	4.7	2.5	11
25	50	61	46	27	64	33	87	42	26	4.7	2.5	8.8
26	46	44	42	25	220	35	89	134	20	4.3	2.5	7.8
27	66	33	35	24	173	34	105	119	18	4.3	4.0	7.3
28	66	27	30	23	177	30	116	75	17	4.3	3.7	7.8
29	61	23	26	22	130	37	96	55	15	4.0	3.0	6.8
30	55	23	24	21	---	35	72	44	14	4.0	3.3	7.8
31	50	---	27	20	---	33	---	36	---	4.0	6.3	---
TOTAL	987.0	898	3213	3548	2753	1461	2927	1426	1037	235.5	104.7	248.5
MEAN	31.8	29.9	104	114	94.9	47.1	97.6	46.0	34.6	7.60	3.38	8.28
MAX	125	69	445	470	297	91	195	134	87	13	6.3	43
MIN	2.0	11	24	20	26	30	31	21	14	4.0	2.5	2.5
CFSM	3.89	3.66	12.7	14.0	11.6	5.77	11.9	5.63	4.24	.93	.41	1.01
IN.	4.49	4.09	14.63	16.15	12.53	6.65	13.33	6.49	4.72	1.07	.48	1.13
AC-FT	1960	1780	6370	7040	5460	2900	5810	2830	2060	467	208	493

CAL YR 1979 TDTAL 17956.4 MEAN 49.2 MAX 535 MIN 2.0 CFSM 6.02 IN 81.75 AC-FT 35620
WTR YR 1980 TDTAL 18838.7 MEAN 51.5 MAX 470 MIN 2.0 CFSM 6.30 IN 85.77 AC-FT 37370

14138850 BULL RUN RIVER NEAR MULTNOMAH FALLS, OR

LOCATION.--Lat 45°29'50", long 122°00'50", near center of sec.12, T.1 S., R.6 E., Multnomah County, Hydrologic Unit 17080001, in Mount Hood National Forest, on right bank 1.2 mi (1.9 km) upstream from North Fork, 7.0 mi (11.3 km) southeast of Multnomah Falls, and at mile 14.8 (23.8 km).

DRAINAGE AREA.--47.9 mi^2 (124.1 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1966 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 1,080 ft (329 m), from topographic map.

REMARKS.--Water-discharge records excellent. Water stored since 1915 in Bull Run Lake, usable capacity, 12,270 acre-ft (15.1 hm^3). No diversion above station.

AVERAGE DISCHARGE.--14 years, 427 ft^3/s (12.09 m^3/s), 121.06 in/yr (2,966 mm/yr), 309,400 acre-ft/yr (382 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,610 ft^3/s (244 m^3/s) Jan. 20, 1972, gage height, 13.22 ft (4.029 m); minimum, 33 ft^3/s (0.93 m^3/s) Sept. 27, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,800 ft^3/s (108 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 2	0700	*4,320	122	*9.66	2.944	Jan. 13	2100	3,830	108	9.20	2.804
Dec. 4	1030	4,150	118	9.50	2.896						

Minimum, 36 ft^3/s (1.02 m^3/s) Oct. 10-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	270	270	559	518	600	306	398	338	133	57	62
2	39	233	2830	575	1380	497	297	381	449	128	57	130
3	38	207	1380	608	1580	442	292	338	467	121	57	78
4	38	245	2690	519	950	508	314	353	375	142	56	66
5	38	270	1320	874	600	471	471	362	311	130	55	60
6	37	233	731	535	1080	395	512	323	273	120	55	56
7	37	200	527	401	1020	353	395	286	252	112	55	64
8	37	177	432	338	625	366	493	265	230	107	53	57
9	37	157	579	415	467	329	1130	252	214	104	53	52
10	36	142	735	398	378	335	915	257	196	102	51	51
11	36	128	485	372	320	489	651	247	183	99	51	48
12	36	116	493	2290	284	391	647	247	192	95	49	50
13	36	108	435	2760	257	460	763	238	489	91	49	51
14	59	102	500	3100	233	415	936	230	460	89	49	53
15	161	96	1060	1500	214	329	1160	219	391	88	49	49
16	76	133	820	1010	200	286	825	205	335	84	48	48
17	73	260	677	973	212	353	740	194	317	81	50	46
18	260	323	699	638	303	474	660	187	273	79	78	53
19	740	250	625	467	516	478	726	185	242	77	55	138
20	634	216	596	385	704	482	806	181	221	76	50	453
21	489	187	820	329	500	418	801	190	205	72	48	335
22	404	250	686	289	398	375	596	233	190	71	47	205
23	527	418	500	268	375	395	523	219	181	67	46	148
24	425	482	408	263	378	341	555	212	179	67	45	120
25	421	474	359	252	446	314	512	300	228	66	44	101
26	359	344	329	226	1220	341	497	941	192	65	43	89
27	456	265	289	210	1010	356	543	835	177	63	49	81
28	449	221	255	190	1050	317	579	516	167	62	53	84
29	421	192	233	170	810	372	504	385	157	62	46	76
30	375	183	214	160	---	369	404	314	142	58	48	89
31	353	---	221	150	---	341	---	273	---	58	81	---
TOTAL	7168	6882	22198	21224	18028	12392	18553	9766	8026	2769	1627	2993
MEAN	231	229	716	685	622	400	618	315	268	89.3	52.5	99.8
MAX	740	482	2830	3100	1580	600	1160	941	489	142	81	453
MIN	36	96	214	150	200	286	292	181	142	58	43	46
CFSM	4.82	4.78	14.9	14.3	13.0	8.35	12.9	6.58	5.60	1.86	1.10	2.08
IN.	5.57	5.34	17.24	16.48	14.00	9.62	14.41	7.58	6.23	2.15	1.26	2.32
AC-FT	14220	13650	44030	42100	35760	24580	36800	19370	15920	5490	3230	5940

CAL YR 1979 TOTAL 125788 MEAN 345 MAX 3190 MIN 36 CFSM 7.20 IN 97.69 AC-FT 249500
WTR YR 1980 TOTAL 131626 MEAN 360 MAX 3100 MIN 36 CFSM 7.52 IN 102.22 AC-FT 261100

14138850 BULL RUN RIVER NEAR MULTNOMAH FALLS, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1977 to current year.
WATER TEMPERATURES: October 1977 to current year.
SUSPENDED SEDIMENT DISCHARGE: October 1977 to current year.

INSTRUMENTATION.--Conductivity/temperature recorder since October 1977. Automatic pumping sediment sampler since October 1977.

COOPERATION.--Chemical data were analyzed by the City of Portland Water Quality Laboratory and were reviewed by the U.S. Geological Survey.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 38 micromhos July 19, 1979; minimum recorded, 10 micromhos Nov. 25, 1977.
WATER TEMPERATURES: Maximum, 17.0°C July 19, 20, 1979; minimum, 0.0°C on many days during winter periods.
SEDIMENT CONCENTRATIONS: Maximum, 290 mg/l Dec. 2, 1977; minimum, 0 mg/l on many days.
SEDIMENT DISCHARGE: Maximum, 5,930 tons (5,380 tonnes) Dec. 2, 1977; minimum, 0 ton (0 tonne) on many days.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 35 micromhos Jan. 31, Feb. 1; minimum recorded, 14 micromhos Apr. 15.
WATER TEMPERATURES: Maximum recorded, 14.5°C Aug. 11, 12; minimum, 0.0°C Jan. 26-29.
SEDIMENT CONCENTRATIONS: Maximum, 24 mg/l (estimated) Dec. 2; minimum, 0 mg/l on many days throughout the year.
SEDIMENT DISCHARGE: Maximum, 228 tons (207 tonnes) Dec. 2; minimum, 0 ton (0 tonne) on many days throughout the year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)
OCT								
06...	1025	36	9.6	29	7.4	4	--	7
13...	1045	36	9.0	29	7.4	15	12	3
22...	1040	359	6.5	20	6.9	44	5	9
27...	1010	539	8.5	20	7.2	11	5	10
NOV								
03...	0930	212	6.5	22	7.1	4	1	0
10...	0900	144	5.3	24	7.2	4	0	1
17...	0945	268	--	23	7.2	12	8	3
24...	0940	381	--	20	7.1	7	3	1
DEC								
01...	1000	179	2.5	22	7.1	2	0	0
08...	1000	429	4.0	20	7.1	4	0	0
15...	1040	1180	6.0	18	7.0	--	--	--
22...	1035	673	4.0	18	7.0	2	14	--
29...	1015	233	3.0	21	7.2	4	0	<1
JAN								
05...	0950	978	4.0	18	7.0	3	1	<1
FEB								
09...	1000	460	--	19	7.1	1	<1	2
16...	0945	196	1.5	22	7.2	<1	1	3
23...	1010	372	4.0	20	7.1	1	<1	<1
MAR								
01...	1030	583	4.0	19	7.1	<1	0	<1
08...	1010	369	4.0	20	7.1	2	<1	0
15...	1030	335	1.5	20	7.1	1	<1	<1
22...	1000	359	4.0	20	7.1	3	0	<1
29...	1015	359	4.0	21	7.0	<1	<1	0
APR								
05...	1040	418	4.0	20	7.2	2	<1	<1
12...	1030	575	4.5	20	7.1	1	<1	<1
19...	1015	704	5.2	20	7.1	1	0	<1
26...	1030	467	5.6	21	7.3	1	<1	<1
MAY								
04...	1015	329	5.0	22	7.2	2	1	1
10...	0915	247	6.3	27	7.2	6	1	2
17...	0913	192	6.6	25	7.3	9	<1	1
24...	1015	209	--	26	7.3	11	1	<1
31...	1030	273	7.6	25	7.3	6	9	0
JUN								
07...	1010	257	7.5	25	7.3	10	2	12
14...	1030	460	7.2	24	7.2	11	4	6
21...	1000	205	9.8	26	7.4	4	0	4
28...	1010	165	9.0	24	7.3	13	1	4
JUL								
05...	0950	130	9.5	26	7.4	19	3	3
12...	1015	96	10.7	27	7.5	10	2	6
19...	0950	77	11.8	28	7.5	26	1	5
26...	1025	65	13.0	29	7.5	20	9	13

14138850 BULL RUN RIVER NEAR MULTNOMAH FALLS, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TUR-BID-ITY (NTU)	COLOR (PLAT-INUM-COBALT UNITS)	SILICA, DIS-SOLVED (MG/L AS SIO2)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT							
06...	.20	<5	--	--	--	--	29
13...	.19	<5	12	<.020	.03	.003	26
22...	.17	<5	--	--	--	--	20
27...	.26	15	--	--	--	--	13
NOV							
03...	.15	<5	--	--	--	--	22
10...	.10	<5	--	--	--	--	25
17...	.24	5	--	--	--	--	25
24...	.19	<5	8.7	.024	.06	<.003	21
DEC							
01...	.10	<5	--	--	--	--	19
08...	.20	<5	--	--	--	--	24
15...	.55	5	7.2	<.020	.06	<.003	19
22...	.24	<5	--	--	--	--	18
29...	.15	<5	--	--	--	--	19
JAN							
05...	.30	<5	7.4	<.020	.04	<.003	19
FEB							
09...	.18	<5	--	--	--	--	20
16...	.11	<5	--	--	--	--	17
23...	.18	<5	--	--	--	--	18
MAR							
01...	.20	<5	--	--	--	--	17
08...	.19	<5	--	--	--	--	20
15...	.14	<5	--	--	--	--	19
22...	.15	<5	--	--	--	--	18
29...	.14	<5	--	--	--	--	15
APR							
05...	.16	<5	--	--	--	--	21
12...	.17	<5	--	--	--	--	21
19...	.21	<5	3.9	<.020	.04	<.003	20
26...	.16	<5	--	--	--	--	22
MAY							
04...	.17	<5	--	--	--	--	20
10...	.17	<5	4.5	<.020	.04	<.003	23
17...	.12	<5	--	--	--	--	24
24...	.14	<5	--	--	--	--	17
31...	.17	<5	9.4	<.020	.01	<.003	21
JUN							
07...	.19	<5	--	--	--	--	25
14...	.18	<5	--	--	--	--	21
21...	.19	<5	10	<.020	.02	.02	22
28...	.14	<5	--	--	--	--	--
JUL							
05...	.15	<5	--	--	--	--	26
12...	.15	<5	12	<.020	.01	<.003	25
19...	.15	<5	--	--	--	--	24
26...	.17	<5	--	--	--	--	30

14138850 BULL RUN RIVER NEAR MULTNOMAH FALLS, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)
AUG								
02...	1050	57	12.5	29	7.5	22	3	30
10...	0705	50	12.3	30	7.4	18	4	10
16...	0945	49	11.0	30	7.5	14	5	27
23...	1010	45	10.8	30	7.5	10	2	15
30...	1000	45	9.5	30	7.5	4	2	20
SEP								
06...	1020	57	10.5	30	7.4	6	3	14
13...	1015	53	10.4	31	7.5	2	1	13
20...	1030	391	9.8	25	7.2	88	85	66
28...	1000	94	9.8	26	7.4	22	14	29

DATE	TUR-BID-ITY (NTU)	COLOR (PLAT-INUM-COBALT UNITS)	SILICA, DIS-SOLVED (MG/L AS SIO2)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
AUG							
02...	.18	<5	13	<.020	.04	.011	25
10...	.12	<5	--	--	--	--	31
16...	.16	<5	--	--	--	--	22
23...	.14	<5	12	<.020	.03	.003	31
30...	.10	<5	--	--	--	--	30
SEP							
06...	.14	<5	--	--	--	--	32
13...	.14	<5	13	<.020	.04	.005	27
20...	.45	20	--	--	--	--	30
28...	.12	<5	--	--	--	--	24

14138850 BULL RUN RIVER NEAR MULTNOMAH FALLS, OR--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	22	25	21	35	---	19	19	21	25	---	
2	33	22	19	20	19	---	20	19	20	25	---	
3	33	22	20	19	18	---	20	20	20	25	---	
4	33	22	18	20	19	---	20	20	20	25	---	
5	33	22	18	18	21	---	18	20	21	25	---	
6	33	21	19	18	20	17	17	20	22	26	---	
7	33	21	20	19	20	18	18	21	23	27	28	
8	33	22	21	20	21	18	18	22	---	29	28	
9	32	22	20	21	22	18	15	22	---	29	28	
10	32	23	19	21	23	19	15	22	---	29	28	
11	33	24	20	22	23	17	16	22	---	30	29	
12	33	25	21	16	24	18	16	22	---	30	29	
13	32	26	19	16	24	18	16	22	---	---	29	
14	32	27	19	15	25	18	15	22	---	---	28	
15	29	27	17	17	26	18	14	22	---	---	28	
16	30	28	17	18	26	19	---	22	---	---	29	
17	30	26	18	18	26	19	---	23	---	---	---	
18	27	24	18	19	25	18	---	23	---	---	---	
19	21	25	18	20	22	18	---	24	---	---	---	
20	20	25	20	21	21	18	---	24	---	---	---	
21	20	25	21	22	21	18	---	24	---	---	---	
22	20	25	21	23	22	18	---	23	---	---	---	
23	20	23	22	23	---	18	---	22	---	---	---	
24	20	22	23	24	---	18	17	23	---	---	---	
25	20	22	24	24	---	19	18	23	---	---	---	
26	20	23	24	24	---	19	18	19	21	---	---	
27	20	24	25	27	---	19	18	18	22	---	---	
28	20	24	25	31	---	19	18	19	23	---	---	
29	20	25	25	34	---	19	18	20	23	---	---	
30	20	26	25	34	---	19	19	21	24	---	---	
31	20	---	25	35	---	19	---	22	---	---	---	
MEAN	27	24	21	22	23	18	17	21	22	27	28	

14138850 BULL RUN RIVER NEAR MULTNOMAH FALLS, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	10.5	10.0	6.5	5.5	4.0	3.0	5.0	4.5	1.0	.5	---	---
2	10.5	10.0	6.5	6.0	5.0	4.0	5.0	4.0	3.0	1.0	---	---
3	10.5	10.0	7.0	6.5	5.5	5.0	4.5	4.0	4.0	3.0	---	---
4	10.5	10.0	7.0	6.5	5.5	5.0	5.0	4.5	4.0	3.5	---	---
5	10.0	9.5	7.5	7.0	5.5	5.0	5.0	3.5	4.0	4.0	---	---
6	10.5	10.0	7.5	7.0	5.5	5.0	3.5	2.5	4.0	3.5	4.0	---
7	11.0	10.5	7.0	6.5	5.5	5.0	2.5	1.5	4.5	3.5	4.5	3.5
8	11.0	10.5	6.5	5.5	5.5	5.0	1.5	.0	4.0	3.5	5.0	4.0
9	10.5	10.5	5.5	5.0	6.0	5.0	.5	.0	3.5	3.0	5.0	4.0
10	10.5	9.5	6.0	5.5	5.0	3.5	1.0	.0	3.5	3.5	5.0	4.5
11	9.5	9.0	5.5	4.5	3.5	3.5	1.5	1.0	3.5	3.0	4.5	3.0
12	9.5	9.0	5.0	4.5	4.0	3.0	3.0	1.0	3.5	2.5	3.5	2.5
13	9.5	9.0	4.5	3.5	5.0	4.0	4.0	3.0	3.0	3.0	3.5	2.5
14	10.5	9.5	4.0	3.0	5.5	5.0	4.0	3.5	3.0	1.0	3.0	2.5
15	11.0	10.5	4.0	3.0	6.0	4.5	4.0	3.5	1.5	.5	2.5	2.0
16	10.5	10.0	5.5	4.0	4.5	3.5	4.5	4.0	2.5	1.0	4.0	2.5
17	10.5	9.0	6.5	5.5	6.0	4.5	4.0	3.5	3.0	2.0	4.0	3.0
18	9.0	8.5	5.5	4.0	6.5	6.0	3.5	2.5	3.5	2.5	4.0	3.0
19	8.5	8.0	5.0	4.5	6.5	6.0	2.5	2.0	4.0	3.5	4.0	3.5
20	8.0	7.0	4.5	4.0	6.0	6.0	3.0	2.0	4.0	3.5	4.5	3.5
21	8.0	7.0	4.0	3.5	6.0	5.0	3.5	3.0	4.0	3.0	4.0	4.0
22	8.5	7.5	4.5	4.0	5.0	4.0	3.0	2.5	4.0	3.5	4.5	4.0
23	9.0	8.5	5.0	4.5	4.0	3.0	3.5	3.0	4.0	---	4.0	3.5
24	9.0	8.5	5.0	4.0	4.0	3.5	4.0	3.5	---	---	4.5	3.5
25	9.5	8.5	4.5	3.5	4.5	4.0	4.0	2.5	---	---	5.0	3.5
26	9.0	8.5	4.0	3.5	4.5	4.5	2.5	.0	---	---	4.0	3.0
27	9.0	8.5	4.0	3.0	4.5	3.5	.5	.0	---	---	4.0	2.5
28	8.5	7.5	3.0	2.0	3.5	3.5	.5	.0	---	---	4.5	3.0
29	7.5	7.5	2.5	1.5	3.5	3.5	.5	.0	---	---	4.5	3.0
30	7.5	7.0	3.5	2.5	3.5	3.0	.5	.5	---	---	4.5	3.0
31	7.0	6.5	---	---	4.5	3.5	.5	.5	---	---	4.5	3.5
MONTH	11.0	6.5	7.5	1.5	6.5	3.0	5.0	.0	4.5	.5	5.0	2.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	5.0	3.5	9.5	6.5	9.0	7.5	13.0	10.0	---	---		
2	5.0	3.0	8.0	6.5	7.5	6.0	12.5	11.0	---	---		
3	5.0	3.5	9.0	5.0	8.0	6.0	11.5	10.0	---	---		
4	5.5	4.0	10.5	7.0	9.5	6.5	10.0	9.5	---	---		
5	5.0	4.0	9.0	7.5	8.0	7.0	11.0	9.5	---	---		
6	4.0	2.0	8.0	7.0	8.5	7.0	13.0	10.0	---	---		
7	3.5	2.0	9.0	6.5	10.0	7.5	12.5	10.5	13.5	---		
8	4.5	3.5	8.0	7.0	---	9.0	12.0	10.5	13.5	12.0		
9	4.0	3.0	7.5	6.5	---	---	13.0	10.5	14.0	12.0		
10	5.0	3.0	7.0	6.5	---	---	13.5	11.0	14.0	12.5		
11	5.5	3.0	7.5	6.5	---	---	12.5	11.0	14.5	13.0		
12	7.0	4.0	7.5	7.0	---	---	---	11.0	14.5	13.0		
13	7.0	4.0	8.0	7.0	---	---	---	---	13.5	12.5		
14	5.5	4.5	7.5	7.0	---	---	---	---	13.0	12.0		
15	5.5	4.0	7.5	6.5	---	---	---	---	12.0	11.0		
16	---	---	8.0	6.5	---	---	---	---	11.5	11.0		
17	---	---	10.0	6.5	---	---	---	---	---	---		
18	---	---	10.0	8.0	---	---	---	---	---	---		
19	---	---	10.5	8.5	---	---	---	---	---	---		
20	---	---	11.0	8.5	---	---	---	---	---	---		
21	---	---	9.5	9.0	---	---	---	---	---	---		
22	---	---	9.0	6.5	---	---	---	---	---	---		
23	---	---	9.0	6.0	---	---	---	---	---	---		
24	---	---	7.0	6.5	---	---	---	---	---	---		
25	7.5	4.5	7.0	6.5	---	---	---	---	---	---		
26	9.0	6.0	6.5	6.0	9.0	---	---	---	---	---		
27	9.5	6.0	7.0	6.0	11.0	8.5	---	---	---	---		
28	7.5	6.5	8.5	6.5	12.0	9.0	---	---	---	---		
29	6.5	5.5	8.5	7.0	12.0	9.5	---	---	---	---		
30	8.0	5.0	8.5	7.5	12.5	9.0	---	---	---	---		
31	---	---	9.0	8.0	---	---	---	---	---	---		
MONTH	9.5	2.0	11.0	5.0	12.5	6.0	13.5	9.5	14.5	11.0		

14138850 BULL RUN RIVER NEAR MULTNOMAH FALLS, OR--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	1	.11	1	.73	2	1.5	2	3.0	2	2.8	2	3.2
2	0	.00	2	1.3	---	228	2	3.1	4	15	1	1.3
3	0	.00	1	.56	2	7.5	2	3.3	2	8.5	0	.00
4	0	.00	1	.66	14	136	2	2.8	1	2.6	0	.00
5	0	.00	0	.00	2	7.1	2	4.7	1	1.6	0	.00
6	0	.00	1	.63	1	2.0	1	1.4	3	8.7	1	1.1
7	0	.00	0	.00	1	1.4	---	.00	1	2.8	1	.95
8	0	.00	1	.48	1	1.2	0	.00	1	1.7	1	.99
9	1	.10	0	.00	2	3.1	0	.00	1	1.3	1	.89
10	0	.00	1	.38	1	2.0	0	.00	0	.00	1	.90
11	1	.10	1	.35	1	1.3	1	1.0	1	.86	2	2.6
12	0	.00	1	.31	2	2.7	15	122	0	.00	1	1.1
13	1	.10	1	.29	1	1.2	12	104	0	.00	3	3.7
14	1	.16	0	.00	1	1.4	19	158	0	.00	1	1.1
15	1	.43	1	.26	3	8.6	2	8.1	0	.00	0	.00
16	1	.21	1	.36	1	2.2	2	5.5	0	.00	1	.77
17	1	.20	1	.70	1	1.8	2	5.3	1	.57	3	2.9
18	1	.70	2	1.7	1	1.9	1	1.7	1	.82	2	2.6
19	1	2.0	1	.68	1	1.7	1	1.3	2	2.8	1	1.3
20	0	.00	0	.00	1	1.6	0	.00	2	3.8	1	1.3
21	1	1.3	1	.50	1	2.2	1	.89	1	1.4	0	.00
22	0	.00	2	1.4	1	1.9	0	.00	0	.00	1	1.0
23	1	1.4	1	1.1	0	.00	1	.72	0	.00	0	.00
24	1	1.1	3	3.9	0	.00	0	.00	0	.00	0	.00
25	1	1.1	2	2.6	1	.97	0	.00	1	1.2	0	.00
26	1	.97	1	.93	0	.00	1	.61	2	6.6	1	.92
27	1	1.2	2	1.4	1	.78	1	.57	2	5.5	1	.96
28	1	1.2	2	1.2	0	.00	1	.51	2	5.7	0	.00
29	1	1.1	2	1.0	2	1.3	1	.46	1	2.2	1	1.0
30	1	1.0	2	.99	0	.00	2	.86	---	---	0	.00
31	1	.95	---	---	0	.00	1	.41	---	---	1	.92
TOTAL	---	15.43	---	24.41	---	421.35	---	430.23	---	76.45	---	31.50

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	0	.00	2	2.1	0	.00	0	.00	0	.00	1	.17
2	0	.00	1	1.0	0	.00	0	.00	0	.00	2	.70
3	0	.00	1	.91	1	1.3	0	.00	0	.00	0	.00
4	2	1.7	2	1.9	0	.00	0	.00	0	.00	0	.00
5	2	2.5	1	.98	0	.00	0	.00	0	.00	0	.00
6	2	2.8	1	.87	1	.74	0	.00	0	.00	0	.00
7	2	2.1	1	.77	0	.00	0	.00	0	.00	0	.00
8	3	4.0	1	.72	1	.62	0	.00	0	.00	0	.00
9	4	12	0	.00	0	.00	0	.00	0	.00	0	.00
10	2	4.9	1	.69	1	.53	0	.00	0	.00	0	.00
11	1	1.8	0	.00	0	.00	0	.00	0	.00	0	.00
12	1	1.7	1	.67	0	.00	0	.00	0	.00	0	.00
13	1	2.1	0	.00	1	1.3	0	.00	0	.00	0	.00
14	1	2.5	1	.62	0	.00	0	.00	0	.00	0	.00
15	1	3.1	0	.00	0	.00	0	.00	0	.00	0	.00
16	1	2.2	1	.55	0	.00	0	.00	0	.00	0	.00
17	1	2.0	0	.00	0	.00	0	.00	0	.00	0	.00
18	1	1.8	1	.50	0	.00	0	.00	0	.00	0	.00
19	1	2.0	0	.00	0	.00	0	.00	0	.00	1	.37
20	0	.00	1	.49	1	.60	0	.00	0	.00	2	2.4
21	0	.00	1	.51	0	.00	0	.00	0	.00	0	.00
22	0	.00	1	.63	0	.00	0	.00	0	.00	0	.00
23	1	1.4	0	.00	0	.00	0	.00	0	.00	0	.00
24	1	1.5	0	.00	0	.00	0	.00	0	.00	0	.00
25	1	1.4	2	1.6	0	.00	0	.00	0	.00	0	.00
26	2	2.7	5	13	0	.00	0	.00	0	.00	0	.00
27	2	2.9	5	11	0	.00	0	.00	0	.00	0	.00
28	2	3.1	2	2.8	0	.00	0	.00	0	.00	0	.00
29	1	1.4	0	.00	0	.00	0	.00	0	.00	0	.00
30	1	1.1	0	.00	0	.00	0	.00	0	.00	0	.00
31	---	---	0	.00	---	---	0	.00	0	.00	---	---
TOTAL	---	64.70	---	42.31	---	5.09	---	0.00	---	0.00	---	3.64

14138870 FIR CREEK NEAR BRIGHTWOOD, OR

LOCATION.--Lat 45°28'56", long 122°01'36", in NE¼SE¼ sec.14, T.1 S., R.6 E., Multnomah County, Hydrologic Unit 17080001, on right bank, 6.4 mi (10.3 km) north of Brightwood and 0.6 mi (1.0 km) above Bull Run Reservoir Number One.

DRAINAGE AREA.--5.46 mi² (14.1 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to current year.

REVISED RECORDS.--WDR OR-78-1: 1976.

GAGE.--Water-stage recorder. Altitude of gage is 1,440 ft (439 m), from topographic map.

REMARKS.--Water-discharge records good. No regulation or diversion above station.

AVERAGE DISCHARGE.--5 years, 34.5 ft³/s (0.977 m³/s), 85.81 in/yr (2,180 mm/yr), 25,000 acre-ft/yr (30.8 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,050 ft³/s (29.7 m³/s) Dec. 2, 1977, gage height, 5.64 ft (1.719 m); minimum, 1.9 ft³/s (0.054 m³/s) Aug. 17-23, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 391 ft³/s (11.1 m³/s) Dec. 2, gage height, 4.40 ft (1.341 m), no peak above base of 400 ft³/s (11.3 m³/s); minimum, 2.1 ft³/s (0.06 m³/s) Oct. 12-14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	26	37	43	37	48	30	31	34	13	4.5	5.3
2	2.5	23	271	48	124	39	29	29	37	12	4.6	13
3	2.4	20	142	52	154	35	27	27	39	12	4.6	6.6
4	2.4	22	218	47	89	43	28	27	31	14	4.6	5.3
5	2.3	25	125	80	58	37	39	27	26	13	4.6	4.7
6	2.3	22	69	51	93	32	43	25	23	12	4.5	4.5
7	2.3	20	49	37	105	31	34	23	21	11	4.3	5.7
8	2.3	17	39	33	65	32	44	22	20	10	4.2	4.7
9	2.3	15	54	29	45	30	117	21	17	10	4.1	4.2
10	2.2	14	59	25	36	30	97	22	16	9.6	3.8	4.0
11	2.2	13	41	27	30	41	69	22	15	9.1	3.7	3.8
12	2.1	11	40	220	27	35	65	22	15	8.9	3.6	4.1
13	2.1	11	40	244	25	42	73	21	43	8.5	3.6	4.6
14	6.6	9.6	43	255	23	43	86	21	40	8.3	3.5	4.3
15	20	9.1	77	137	22	34	101	20	36	8.1	3.5	4.0
16	8.3	12	60	106	20	29	73	18	31	7.7	3.5	3.7
17	6.9	20	55	106	20	33	65	17	32	7.3	3.7	3.6
18	26	25	57	66	27	47	57	16	28	7.1	6.0	4.2
19	68	22	52	48	41	50	66	15	25	6.7	4.1	11
20	65	20	49	37	57	53	82	15	23	6.4	3.6	44
21	49	18	76	32	40	45	79	16	21	6.2	3.5	37
22	39	26	66	28	33	39	57	22	19	6.0	3.5	22
23	45	40	48	27	32	42	48	20	18	5.9	3.5	17
24	37	49	42	27	32	36	51	20	18	5.7	3.4	14
25	37	53	37	27	40	33	45	31	22	5.6	3.3	12
26	29	37	33	25	114	33	42	103	19	5.6	3.1	10
27	37	27	29	23	85	34	44	90	17	5.4	3.6	8.9
28	38	23	25	21	88	32	45	49	16	5.1	3.8	9.1
29	36	21	24	20	66	35	39	34	15	5.0	3.4	8.1
30	33	20	22	19	---	34	32	28	14	4.9	3.6	9.4
31	32	---	22	17	---	32	---	25	---	4.6	8.9	---
TOTAL	643.0	670.7	2001	1957	1628	1159	1707	879	731	254.7	126.2	292.8
MEAN	20.7	22.4	64.5	63.1	56.1	37.4	56.9	28.4	24.4	8.22	4.07	9.76
MAX	68	53	271	255	154	53	117	103	43	14	8.9	44
MIN	2.1	9.1	22	17	20	29	27	15	14	4.6	3.1	3.6
CFSM	3.79	4.10	11.8	11.6	10.3	6.85	10.4	5.20	4.47	1.51	.75	1.79
IN.	4.38	4.57	13.63	13.33	11.09	7.90	11.63	5.99	4.98	1.74	.86	1.99
AC-FT	1280	1330	3970	3880	3230	2300	3390	1740	1450	505	250	581

CAL YR 1979 TOTAL 11486.3 MEAN 31.5 MAX 308 MIN 2.1 CFSM 5.77 IN 78.24 AC-FT 22780
WTR YR 1980 TOTAL 12049.4 MEAN 32.9 MAX 271 MIN 2.1 CFSM 6.03 IN 82.08 AC-FT 23900

14138870 FIR CREEK NEAR BRIGHTWOOD, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1977 to current year.
WATER TEMPERATURES: October 1977 to current year.
SUSPENDED SEDIMENT DISCHARGE: October 1977 to current year.

INSTRUMENTATION.--Conductivity/temperature recorder since October 1977. Automatic pumping sediment sampler since October 1977.

COOPERATION.--Chemical data were analyzed by the City of Portland Water Quality laboratory and were reviewed by the U.S. Geological Survey.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 30 micromhos Aug. 5, 12, 13, 17-19, 27, Sept. 10, 11, 16-18, 1980; minimum, 9 micromhos Dec. 4, 1978.
WATER TEMPERATURES: Maximum recorded, 15.0°C Aug. 8, 9, 1978; minimum recorded, 0.0°C on several days in 1978-80.
SEDIMENT CONCENTRATIONS: Maximum, 133 mg/l Dec. 2, 1977; minimum, 0 mg/l on many days.
SEDIMENT DISCHARGE: Maximum, 345 tons (313 tonnes) Dec. 2, 1977; minimum, 0 tons (0 tonnes) on many days.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 30 micromhos Aug. 5, 12, 13, 17-19, 27, Sept. 10, 11, 16-18; minimum, 15 micromhos Dec. 4.
WATER TEMPERATURES: Maximum, 13.5°C July 22, 28; minimum, 0.0°C on several days.
SEDIMENT CONCENTRATIONS: Maximum, 9 mg/l Dec. 2; minimum, 0 mg/l many days throughout the year.
SEDIMENT DISCHARGE: Maximum, 8 tons (7 tonnes) Dec. 2; minimum, 0 tons (0 tonnes) on many days throughout the year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)
OCT								
07...	0930	2.2	10.0	27	7.3	2	--	0
14...	0940	2.6	9.5	28	7.2	74	55	46
23...	0945	48	7.8	--	7.1	20	4	10
28...	0945	41	7.0	20	7.1	3	1	2
NOV								
04...	0935	21	6.5	22	7.0	13	<1	1
11...	0830	12	6.5	23	7.1	14	<1	0
18...	0915	25	6.0	22	7.1	9	0	1
25...	0925	53	4.0	21	7.0	9	<1	0
DEC								
02...	1000	324	5.0	16	6.8	20	14	13
09...	0950	33	6.0	21	7.1	3	<1	0
16...	1000	60	3.5	20	7.0	<1	0	<1
30...	0900	22	3.0	22	7.2	5	<1	<1
JAN								
06...	0940	51	3.0	19	7.1	7	<1	<1
FEB								
17...	1000	19	3.0	23	7.2	3	<1	<1
24...	1045	31	4.5	21	7.1	2	<1	<1
MAR								
02...	0945	38	5.0	20	7.1	1	1	<1
09...	1040	27	4.7	21	7.1	2	<1	<1
16...	1045	26	3.2	21	7.3	12	<1	<1
23...	1045	38	4.0	21	7.0	<1	1	<1
30...	1125	33	3.5	22	7.1	2	<1	<1
APR								
06...	1045	41	2.5	20	7.1	2	<1	<1
12...	1255	65	5.0	20	7.1	<1	<1	<1
20...	1110	71	5.0	20	7.2	1	<1	<1
27...	1030	38	5.5	21	7.1	4	<1	<1
MAY								
04...	1015	25	7.0	23	7.2	5	<1	0
11...	0841	20	6.0	26	7.2	0	<1	<1
18...	0842	16	6.1	26	7.2	7	<1	0
25...	1045	27	--	22	7.2	14	3	1
JUN								
01...	0950	45	7.0	23	7.0	11	8	10
08...	1010	21	8.0	26	7.3	6	<1	2
15...	0930	36	7.0	26	7.2	3	<1	4
22...	1030	19	8.5	25	7.2	10	1	4
29...	0950	14	8.5	24	7.3	18	0	8
JUL								
06...	1010	10	9.0	25	7.3	24	6	6
11...	1100	9.1	9.2	26	--	--	--	--
13...	1000	8.0	10.0	25	7.4	10	1	3
20...	1020	6.5	10.5	27	7.4	22	1	9
27...	1105	5.2	12.0	27	7.4	12	1	28
AUG								
03...	1000	1.6	11.0	27	7.5	26	2	49

14138870 FIR CREEK NEAR BRIGHTWOOD, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TUR-BID-ITY (NTU)	COLOR (PLAT-INUM-COBALT UNITS)	SILICA, DIS-SOLVED (MG/L AS SIO2)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT							
07...	.17	<5	--	--	--	--	28
14...	.30	<5	12	<.020	<.05	.003	29
23...	.26	10	--	--	--	--	20
28...	.17	20	--	--	--	--	21
NOV							
04...	.11	5	--	--	--	--	21
11...	.19	<5	--	--	--	--	23
18...	.17	5	--	--	--	--	23
25...	.14	5	7.9	<.020	.08	<.003	20
DEC							
02...	1.0	20	--	--	--	--	24
09...	.17	<5	--	--	--	--	23
16...	.17	<5	7.7	<.020	.07	<.003	20
30...	.09	<5	--	--	--	--	19
JAN							
06...	.12	<5	7.9	<.020	.04	<.003	19
FEB							
17...	.16	<5	--	--	--	--	19
24...	.13	<5	--	--	--	--	18
MAR							
02...	.12	<5	--	--	--	--	17
09...	.11	<5	--	--	--	--	19
16...	.07	<5	--	--	--	--	19
23...	.13	<5	--	--	--	--	18
30...	.12	<5	--	--	--	--	16
APR							
06...	.20	<5	--	--	--	--	20
12...	.16	<5	--	--	--	--	21
20...	.19	<5	7.5	<.020	.03	<.003	16
27...	.18	<5	--	--	--	--	19
MAY							
04...	.16	5	--	--	--	--	19
11...	.11	<5	4.2	<.020	.04	<.003	22
18...	.14	<5	--	--	--	--	22
25...	.25	5	--	--	--	--	19
JUN							
01...	.21	5	7.6	<.020	.02	<.003	20
08...	.14	<5	--	--	--	--	23
15...	.17	<5	--	--	--	--	19
22...	.10	<5	9.7	<.020	.02	.003	20
29...	.13	<5	--	--	--	--	--
JUL							
06...	.13	<5	--	--	--	--	23
11...	--	--	--	--	--	--	--
13...	.12	<5	12	<.020	.02	.003	23
20...	.13	<5	--	--	--	--	24
27...	.14	<5	--	--	--	--	27
AUG							
03...	.16	<5	13	<.020	.05	.004	25

14138870 FIR CREEK NEAR BRIGHTWOOD, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)
AUG								
08...	1000	3.7	10.9	28	7.2	--	--	--
09...	0730	3.7	10.8	28	7.4	4	1	41
17...	0944	3.5	10.0	28	7.5	22	3	23
20...	1300	3.6	11.2	28	7.4	--	--	--
24...	0950	3.5	10.0	28	7.4	2	1	22
31...	1010	10	9.0	29	7.3	14	9	89
SEP								
02...	1030	17	9.6	27	7.1	--	--	--
07...	1025	5.8	10.5	29	7.4	<1	0	40
14...	1020	4.3	9.0	29	7.4	2	<1	10
21...	1100	32	9.0	24	7.2	26	8	30
27...	1220	8.9	9.5	29	7.3	2	1	7

DATE	TUR-BID-ITY (NTU)	COLOR (PLAT-INUM-COBALT UNITS)	SILICA, DIS-SOLVED (MG/L AS SIO2)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
AUG							
08...	--	--	--	--	--	--	--
09...	.11	<5	--	--	--	--	29
17...	.14	<5	--	--	--	--	21
20...	.50	--	12	<.002	.00	.000	--
24...	.11	<5	12	<.020	.06	.004	25
31...	.20	<5	--	--	--	--	31
SEP							
02...	--	--	--	--	--	--	--
07...	.17	<5	--	--	--	--	30
14...	.15	<5	13	<.020	.05	.015	27
21...	.27	10	--	--	--	--	27
27...	.18	<5	--	--	--	--	24

14138870 FIR CREEK NEAR BRIGHTWOOD, OR--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	22	23	23	21	18	21	21	21	22	27	28
2	28	22	18	23	18	19	21	21	20	22	27	27
3	28	23	18	22	17	19	21	21	20	22	27	27
4	28	24	17	23	18	19	21	21	20	22	28	27
5	28	24	18	21	19	19	20	21	21	22	28	27
6	28	24	19	22	19	19	20	21	21	22	28	27
7	28	24	20	23	18	20	20	21	22	23	28	27
8	28	25	21	23	19	20	20	21	22	23	29	27
9	28	25	20	23	20	20	18	21	22	23	28	28
10	28	25	20	23	20	20	19	21	23	23	28	29
11	27	25	20	23	21	19	19	22	23	23	28	29
12	27	25	21	19	21	20	19	22	23	23	29	29
13	27	25	21	18	21	20	19	22	22	24	29	28
14	28	25	21	18	21	19	19	21	21	24	29	28
15	28	25	19	19	22	20	18	22	21	24	28	29
16	27	26	19	20	22	20	19	23	21	23	28	29
17	26	25	19	20	22	20	19	24	21	24	29	29
18	25	25	19	21	21	20	19	25	21	25	29	29
19	21	24	20	21	19	20	19	26	21	25	30	27
20	20	24	20	22	18	20	19	25	22	25	29	25
21	20	24	20	22	19	20	19	25	22	26	28	23
22	20	24	20	22	19	20	20	24	22	27	28	23
23	20	22	21	22	20	20	20	23	22	26	28	23
24	20	---	22	22	20	20	20	23	22	26	29	23
25	21	---	22	22	19	20	20	22	21	26	29	23
26	21	26	23	22	17	20	20	20	22	27	28	24
27	21	26	24	23	17	21	20	19	22	27	28	24
28	21	25	24	23	17	21	20	20	22	27	27	25
29	21	24	25	23	18	21	20	21	22	27	27	25
30	22	24	25	23	---	21	20	21	22	27	27	26
31	22	---	25	23	---	21	---	22	---	27	27	---
MEAN	25	24	21	22	19	20	20	22	22	24	28	27

14138870 FIR CREEK NEAR BRIGHTWOOD, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	10.0	9.5	6.5	5.5	4.0	2.0	4.5	4.0	2.0	1.0	5.0	4.5
2	10.0	9.0	7.0	6.0	4.5	3.5	4.5	4.0	2.5	1.5	5.0	4.5
3	10.0	9.5	7.0	6.5	5.0	4.5	4.0	4.0	3.5	2.5	4.5	4.5
4	10.0	9.5	7.0	6.5	5.5	4.5	4.5	4.0	3.5	3.0	4.5	4.5
5	10.0	9.5	7.0	7.0	5.5	5.0	4.5	3.5	4.0	3.5	4.5	3.0
6	10.0	9.5	7.0	7.0	5.5	5.5	3.5	3.0	4.0	3.5	4.0	3.0
7	10.0	10.0	7.0	6.5	5.5	5.0	3.0	2.0	4.0	3.5	4.0	3.5
8	10.5	10.0	6.5	6.0	5.5	5.0	2.0	.0	4.0	3.5	4.5	4.0
9	10.0	9.5	6.0	5.5	6.0	4.5	1.5	.0	3.5	3.5	4.5	4.0
10	10.0	9.5	6.0	5.5	4.5	3.5	2.0	1.0	3.5	3.5	4.5	4.0
11	9.5	9.0	5.5	5.0	4.0	3.5	2.5	1.0	3.5	3.0	4.5	3.0
12	9.5	9.0	5.0	5.0	4.0	3.5	3.0	1.0	3.5	3.0	3.5	3.0
13	9.5	9.0	5.0	4.5	4.5	4.0	3.5	3.0	3.5	3.0	3.5	3.0
14	9.5	9.5	4.5	4.0	5.0	4.5	4.0	3.5	3.0	2.5	3.0	2.5
15	10.0	9.5	4.5	3.5	5.0	4.5	4.0	4.0	2.5	2.0	3.0	2.5
16	9.5	9.5	5.5	4.5	4.5	4.0	4.0	4.0	2.5	2.5	3.5	3.0
17	9.5	8.5	6.0	5.0	5.5	4.5	4.0	3.5	3.5	2.5	3.5	3.0
18	8.5	8.0	5.0	4.0	5.5	5.5	3.5	3.0	3.5	3.0	4.0	3.0
19	8.0	7.0	5.0	4.5	6.0	5.5	3.0	2.5	4.0	3.5	4.0	3.5
20	7.0	7.0	4.5	4.0	5.5	5.5	3.5	2.5	4.0	3.5	4.0	4.0
21	7.5	7.0	4.0	4.0	5.5	4.5	3.5	3.5	4.0	3.5	4.0	4.0
22	7.5	7.0	4.5	4.0	4.5	4.0	3.5	3.0	4.0	3.5	4.5	4.0
23	8.0	7.5	5.0	4.5	4.0	3.5	3.5	3.5	4.0	4.0	4.0	3.5
24	8.5	7.5	---	---	4.5	4.0	3.5	3.5	4.5	4.0	4.0	3.5
25	8.5	8.0	---	---	4.5	4.5	4.0	3.0	4.5	4.0	4.0	3.5
26	8.0	7.5	4.0	4.0	4.5	4.5	3.0	.5	4.5	4.0	4.0	2.5
27	8.0	7.5	4.0	3.0	4.5	4.0	.5	.0	4.5	4.0	4.0	2.5
28	7.5	7.0	3.5	2.5	4.0	3.5	.0	.0	4.5	4.5	4.5	3.5
29	7.0	6.5	3.0	2.0	4.0	3.5	.0	.0	4.5	4.0	4.0	3.0
30	7.0	6.5	3.5	2.0	3.5	3.0	.0	.0	---	---	4.0	3.0
31	6.5	6.0	---	---	4.0	3.5	2.0	.0	---	---	4.0	3.5
MONTH	10.5	6.0	7.0	2.0	6.0	2.0	4.5	.0	4.5	1.0	5.0	2.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	4.5	3.5	7.0	5.5	7.0	6.0	10.5	8.5	12.0	11.0	10.0	9.0
2	4.0	3.5	6.5	5.5	6.0	5.5	9.5	9.0	11.5	11.0	10.0	9.5
3	4.5	3.5	7.0	5.0	6.5	5.5	9.0	8.5	11.5	10.5	9.5	8.5
4	4.5	3.5	8.0	6.0	7.0	5.5	8.5	8.0	11.5	10.0	10.0	9.0
5	4.5	3.5	7.0	6.5	6.5	6.0	9.0	8.0	11.0	10.0	10.5	9.5
6	3.5	2.0	6.5	6.0	7.0	6.0	10.0	8.0	11.0	10.0	11.0	10.0
7	3.5	2.5	7.0	5.5	7.5	6.5	11.0	8.5	11.5	10.0	10.5	10.0
8	4.0	3.5	6.5	6.0	8.0	7.0	11.0	9.5	11.5	11.0	10.5	9.5
9	3.5	3.0	6.5	6.0	7.5	7.5	10.5	9.5	12.0	10.5	11.0	10.0
10	4.0	3.5	6.0	6.0	8.0	7.0	10.0	9.0	12.5	11.0	11.5	10.5
11	4.5	3.5	6.0	5.5	8.0	7.5	9.5	9.0	13.0	11.5	11.0	10.5
12	5.0	4.0	6.0	6.0	7.5	7.0	10.0	9.0	12.0	11.5	11.0	10.5
13	5.0	4.0	6.5	6.0	7.0	6.5	11.0	9.0	12.0	11.0	10.5	9.5
14	4.5	4.0	6.0	5.5	6.5	6.5	10.0	9.5	11.5	10.5	10.0	9.0
15	4.5	3.5	6.0	5.5	7.5	6.5	11.0	9.0	10.5	10.0	10.0	9.0
16	5.0	4.0	6.5	5.5	7.5	7.0	10.5	9.5	10.5	10.5	10.0	9.0
17	5.0	4.0	8.0	6.0	8.0	7.0	11.0	9.5	11.0	10.0	10.0	9.5
18	5.5	4.0	8.5	7.0	8.5	7.0	11.0	9.5	10.5	10.0	10.0	9.5
19	5.0	4.5	8.5	7.0	9.0	7.0	11.0	9.5	11.0	9.5	9.5	9.5
20	4.5	4.0	9.0	7.5	8.5	8.0	12.0	10.0	11.0	10.0	9.5	9.0
21	4.0	3.5	8.0	7.5	9.0	8.0	13.0	11.0	10.5	9.5	9.0	8.5
22	5.0	4.0	7.5	6.0	8.5	8.0	13.5	12.0	11.0	9.5	8.5	7.5
23	5.5	4.5	6.5	6.0	8.5	8.0	13.0	11.5	11.0	9.5	9.0	8.5
24	5.0	4.5	6.0	6.0	8.5	7.5	12.0	11.0	10.5	10.0	9.0	8.5
25	5.5	4.0	6.0	5.5	8.5	7.5	12.5	11.0	11.0	9.5	9.5	8.5
26	6.5	5.0	5.5	5.5	8.0	7.5	12.5	11.0	11.0	9.5	10.0	9.0
27	7.0	5.0	6.0	5.5	8.5	7.5	13.0	11.5	10.5	10.0	9.5	9.0
28	6.0	5.0	6.5	5.5	9.5	7.5	13.5	12.0	10.0	9.5	9.5	9.0
29	5.0	4.5	6.5	6.0	9.5	8.0	12.5	11.0	10.0	8.5	9.5	9.0
30	6.0	4.5	6.5	6.0	10.0	7.5	12.5	10.5	9.5	9.0	10.0	9.5
31	---	---	7.0	6.5	---	---	12.5	11.0	9.5	9.0	---	---
MONTH	7.0	2.0	9.0	5.0	10.0	5.5	13.5	8.0	13.0	8.5	11.5	7.5

14138870 FIR CREEK NEAR BRIGHTWOOO, OR--Continued

SUSPENOEO-SEOIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

OAY	MEAN CONCEN-TRATION (MG/L)	LOAOS (T/OAY)	MEAN CONCEN-TRATION (MG/L)	LOAOS (T/OAY)	MEAN CONCEN-TRATION (MG/L)	LOAOS (T/OAY)	MEAN CONCEN-TRATION (MG/L)	LOAOS (T/OAY)	MEAN CONCEN-TRATION (MG/L)	LOAOS (T/OAY)	MEAN CONCEN-TRATION (MG/L)	LOAOS (T/OAY)
	OCTOBER		NOVEMBER		OECEMBER		JANUARY		FEBRUARY		MARCH	
1	1	.01	0	.00	1	.10	0	.00	1	.10	0	.00
2	0	.00	0	.00	9	7.9	0	.00	2	.67	0	.00
3	0	.00	0	.00	1	.38	0	.00	1	.41	0	.00
4	0	.00	1	.06	2	1.7	0	.00	1	.24	0	.00
5	0	.00	1	.07	0	.00	1	.22	0	.00	0	.00
6	0	.00	0	.00	0	.00	0	.00	1	.25	0	.00
7	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
8	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
9	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
10	0	.00	0	.00	0	.00	0	.00	0	.00	2	.16
11	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
12	0	.00	0	.00	0	.00	6	4.1	0	.00	0	.00
13	0	.00	0	.00	0	.00	4	2.7	0	.00	0	.00
14	1	.02	0	.00	0	.00	2	1.4	0	.00	0	.00
15	1	.06	0	.00	0	.00	---	.37	0	.00	0	.00
16	1	.02	0	.00	0	.00	---	.29	0	.00	0	.00
17	1	.02	0	.00	0	.00	---	.00	0	.00	1	.09
18	2	.14	0	.00	0	.00	---	.00	0	.00	0	.00
19	1	.18	0	.00	0	.00	---	.00	1	.11	0	.00
20	2	.35	0	.00	0	.00	---	.00	1	.15	0	.00
21	2	.27	0	.00	0	.00	---	.00	1	.11	0	.00
22	0	.00	0	.00	0	.00	---	.00	1	.09	1	.11
23	0	.00	0	.00	0	.00	---	.00	1	.09	1	.11
24	1	.10	0	.00	0	.00	0	.00	1	.09	1	.10
25	1	.10	0	.00	0	.00	0	.00	2	.22	1	.09
26	1	.08	0	.00	0	.00	0	.00	2	.61	1	.09
27	1	.10	0	.00	0	.00	0	.00	2	.46	1	.09
28	1	.10	0	.00	0	.00	0	.00	2	.47	1	.09
29	0	.00	0	.00	0	.00	1	.05	1	.18	1	.09
30	1	.09	0	.00	0	.00	0	.00	---	---	1	.09
31	0	.00	---	---	0	.00	0	.00	---	---	1	.09
TOTAL	---	1.64	---	0.13	---	10.08	---	9.13	---	4.25	---	1.20

DAY	MEAN CONCEN-TRATION (MG/L)	LOAOS (T/OAY)	MEAN CONCEN-TRATION (MG/L)	LOAOS (T/OAY)	MEAN CONCEN-TRATION (MG/L)	LOAOS (T/OAY)	MEAN CONCEN-TRATION (MG/L)	LOAOS (T/OAY)	MEAN CONCEN-TRATION (MG/L)	LOAOS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/OAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1	.08	1	.08	0	.00	0	.00	0	.00	0	.00
2	1	.08	0	.00	0	.00	0	.00	0	.00	1	.04
3	1	.07	0	.00	0	.00	0	.00	0	.00	0	.00
4	1	.08	0	.00	0	.00	0	.00	0	.00	0	.00
5	1	.11	0	.00	0	.00	0	.00	0	.00	0	.00
6	1	.11	0	.00	0	.00	0	.00	0	.00	0	.00
7	1	.09	0	.00	0	.00	0	.00	0	.00	0	.00
8	2	.24	0	.00	0	.00	0	.00	0	.00	0	.00
9	3	.94	1	.06	0	.00	0	.00	0	.00	0	.00
10	2	.52	0	.00	0	.00	0	.00	0	.00	0	.00
11	1	.19	0	.00	0	.00	0	.00	0	.00	0	.00
12	2	.35	0	.00	0	.00	0	.00	0	.00	0	.00
13	1	.20	0	.00	0	.00	0	.00	0	.00	0	.00
14	1	.23	0	.00	0	.00	0	.00	0	.00	0	.00
15	1	.27	0	.00	0	.00	0	.00	0	.00	0	.00
16	1	.20	0	.00	0	.00	0	.00	0	.00	0	.00
17	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
18	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
19	1	.18	0	.00	0	.00	0	.00	0	.00	0	.00
20	0	.00	0	.00	0	.00	0	.00	0	.00	1	.12
21	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
22	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
23	1	.13	0	.00	0	.00	0	.00	0	.00	0	.00
24	1	.14	0	.00	0	.00	0	.00	0	.00	0	.00
25	1	.12	3	.25	0	.00	0	.00	0	.00	0	.00
26	1	.11	2	.56	0	.00	0	.00	0	.00	0	.00
27	1	.12	2	.49	0	.00	0	.00	0	.00	0	.00
28	1	.12	1	.13	0	.00	0	.00	1	.01	0	.00
29	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
30	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
31	---	---	0	.00	---	---	0	.00	1	.02	---	---
TOTAL	---	4.68	---	1.57	---	0.00	---	0.00	---	0.03	---	0.16

14138900 NORTH FORK BULL RUN RIVER NEAR MULTNOMAH FALLS, OR

LOCATION.--Lat 45°29'40", long 122°02'05", near line between SE¼ and SW¼ sec.11, T.1 S., R.6 E., Multnomah County, Hydrologic Unit 17080001, Mount Hood National Forest, on left bank 7.0 mi (11.3 km) southeast of Multnomah Falls and at mouth.

DRAINAGE AREA.--8.32 mi² (21.55 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,060 ft (323 m), from topographic map. Prior to Oct. 1, 1978, at site 700 ft (213 m) upstream at datum 18.7 ft (5.70 m) higher.

REMARKS.--Records excellent. Regulation at times since 1958 by North Fork dam, capacity, about 1,030 acre-ft (1.27 hm³). No diversion above station.

AVERAGE DISCHARGE.--15 years, 77.9 ft³/s (2.206 m³/s), 127.15 in/yr (3,230 mm/yr), 56,440 acre-ft/yr (69.6 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,700 ft³/s (275 m³/s), probably affected by surge from release of water temporarily impounded by landslide upstream from station, Jan. 20, 1972, gage height, 9.89 ft (3.014 m), from floodmark, from rating curve extended above 850 ft³/s (24.1 m³/s) on basis of estimate of peak flow from slope-area survey; minimum, 9.1 ft³/s (0.26 m³/s) Oct. 2-14, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 672 ft³/s (19.0 m³/s) Dec. 4, gage height, 5.82 ft (1.774 m), no peak above base of 700 ft³/s (19.8 m³/s); minimum, 9.1 ft³/s (0.26 m³/s) Oct. 2-14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	41	73	127	80	93	51	58	62	27	16	18
2	9.5	35	418	98	207	77	49	54	66	26	16	29
3	9.5	33	216	88	235	63	51	51	63	26	16	18
4	9.1	49	460	86	138	60	54	48	53	42	16	17
5	9.1	51	219	125	102	59	77	48	48	31	16	16
6	9.1	40	132	77	201	52	78	46	44	26	16	16
7	9.1	34	95	62	173	48	63	42	45	24	16	18
8	9.5	31	74	55	105	52	77	40	42	24	16	16
9	9.1	28	107	54	80	48	186	43	39	24	16	15
10	9.1	26	115	46	66	57	145	45	36	24	16	15
11	9.1	24	77	51	59	86	111	40	34	23	16	15
12	9.1	23	75	317	51	67	113	39	42	22	15	15
13	9.1	22	75	379	45	77	119	37	132	22	15	15
14	13	21	85	408	41	77	132	35	91	21	15	15
15	23	20	162	222	36	62	195	33	71	21	15	15
16	12	31	113	186	34	52	136	31	63	20	15	14
17	11	54	119	170	40	68	121	31	58	19	15	14
18	47	49	125	105	70	95	102	29	51	19	24	16
19	89	44	113	81	103	93	115	28	46	19	16	31
20	74	39	111	66	123	89	121	27	42	19	15	85
21	55	34	184	57	83	75	117	32	39	19	15	49
22	54	66	132	51	67	66	91	43	36	18	15	32
23	53	81	93	46	64	66	80	40	34	18	15	27
24	62	95	80	45	66	60	89	40	34	18	14	24
25	67	86	68	44	78	54	75	57	52	18	14	22
26	54	63	59	41	170	57	71	162	41	17	14	20
27	67	49	48	35	134	59	73	125	35	17	17	19
28	60	42	44	36	152	51	75	81	32	17	18	21
29	54	38	37	34	121	59	70	66	31	16	15	19
30	53	37	36	31	---	53	62	55	29	16	15	23
31	49	---	45	29	---	53	---	51	---	16	22	---
TOTAL	1016.9	1286	3790	3252	2924	2028	2899	1557	1491	669	495	669
MEAN	32.8	42.9	122	105	101	65.4	96.6	50.2	49.7	21.6	16.0	22.3
MAX	89	95	460	408	235	95	195	162	132	42	24	85
MIN	9.1	20	36	29	34	48	49	27	29	16	14	14
CFSM	3.94	5.16	14.7	12.6	12.1	7.86	11.6	6.03	5.97	2.60	1.92	2.68
IN.	4.55	5.75	16.94	14.54	13.07	9.07	12.96	6.96	6.67	2.99	2.21	2.99
AC-FT	2020	2550	7520	6450	5800	4020	5750	3090	2960	1330	982	1330

CAL YR 1979 TOTAL 20877.5 MEAN 57.2 MAX 565 MIN 9.1 CFSM 6.88 IN 93.34 AC-FT 41410
WTR YR 1980 TOTAL 22076.9 MEAN 60.3 MAX 460 MIN 9.1 CFSM 7.25 IN 98.70 AC-FT 43790

14138900 NORTH FORK BULL RUN RIVER NEAR MULTNOMAH FALLS, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1978 to current year.
WATER TEMPERATURES: October 1978 to current year.
SEDIMENT DISCHARGE: October 1978 to current year.

INSTRUMENTATION.--Conductivity/temperature recorder since October 1978. Automatic pumping sampler since October 1978.

COOPERATION.--Chemical data were analyzed by the City of Portland Water Quality Laboratory and were reviewed by the U.S. Geological Survey.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 48 micromhos Sept. 16, 17, 1980; minimum, 12 micromhos Dec. 2, 4, 1979.
WATER TEMPERATURES: Maximum recorded, 14.0°C July 18-20, 1979; minimum, 0.0°C on several days during winter periods.
SEDIMENT CONCENTRATIONS: Maximum daily, 97 mg/l Jan. 12, 1980; minimum, 0 mg/l on many days throughout the year.
SEDIMENT DISCHARGE: Maximum daily, 150 tons (136 tonnes) Feb. 7, 1979; minimum, 0 tons (0 tonnes) on many days throughout the year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 48 micromhos Sept. 16, 17; minimum, 12 micromhos Dec. 2, 4.
WATER TEMPERATURES: Maximum, 13.5°C July 21, 22, 28; minimum, 0.0°C on several days during the winter.
SEDIMENT CONCENTRATIONS: Maximum daily, 97 mg/l Jan. 12; minimum, 0 mg/l on many days throughout the year.
SEDIMENT DISCHARGE: Maximum daily, 105 tons (95 tonnes) Jan. 12; minimum, 0 tons (0 tonnes) on many days throughout the year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)
OCT								
06...	1215	8.7	9.0	42	7.6	2	--	3
13...	1215	8.7	8.5	43	7.6	1	<1	2
22...	1130	63	7.5	25	7.1	30	9	3
27...	1100	71	8.5	22	7.2	5	6	7
NOV								
03...	1045	31	7.0	27	7.3	2	2	0
10...	1010	25	5.5	29	7.3	2	<1	<1
17...	1045	49	7.0	26	7.2	13	10	4
24...	1100	78	4.0	22	7.1	10	5	<1
DEC								
01...	1110	36	3.0	26	7.2	3	0	0
08...	1120	71	5.0	21	7.1	3	1	0
15...	1135	186	5.0	18	7.0	3	3	0
22...	1200	125	4.0	18	7.0	--	--	--
29...	1125	40	3.5	23	7.1	3	1	<1
JAN								
05...	1100	553	3.0	18	7.0	7	1	<1
FEB								
09...	1105	79	--	21	7.1	3	0	<1
16...	1105	36	3.0	26	7.3	<1	<1	1
23...	1115	65	4.0	22	7.1	1	0	1
MAR								
01...	1125	92	5.0	24	7.1	<1	<1	1
08...	1125	55	5.0	23	7.1	<1	<1	0
15...	1115	76	1.5	23	7.0	3	<1	<1
22...	1145	63	4.0	23	7.1	1	<1	<1
29...	1150	63	4.0	24	7.0	2	<1	1
APR								
05...	1155	76	4.5	23	7.3	<1	<1	<1
12...	1150	92	5.0	21	7.1	1	0	<1
19...	1145	111	6.0	20	7.1	1	<1	0
26...	1145	67	8.0	23	7.3	<1	<1	<1
MAY								
04...	1145	50	7.0	27	7.3	<1	<1	0
10...	1005	50	7.2	32	7.2	1	<1	<1
17...	0953	30	5.8	32	7.3	9	<1	1
24...	1130	40	7.0	32	7.4	11	1	<1
25...	0930	52	6.8	27	--	--	--	--
31...	1210	49	8.5	29	7.3	2	<1	1
JUN								
06...	1100	42	7.7	26	7.4	--	--	--
07...	1145	48	9.0	29	7.3	<1	0	3
13...	1330	132	8.1	21	--	--	--	--
14...	1140	86	8.0	25	7.3	4	1	6
20...	1000	42	--	--	--	--	--	--
21...	1140	38	10.0	29	7.4	<1	1	3
28...	1200	32	9.5	30	7.4	2	<1	2

14138900 NORTH FORK BULL RUN RIVER NEAR MULTNOMAH FALLS, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TUR-BID-ITY (NTU)	COLOR (PLAT-INUM-COBALT UNITS)	SILICA, DIS-SOLVED (MG/L AS SIO2)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT							
06...	.18	<5	--	--	--	--	40
13...	.19	<5	8.4	<.020	.03	.020	41
22...	.20	<5	--	--	--	--	24
27...	.24	20	--	--	--	--	25
NOV							
03...	.16	<5	--	--	--	--	26
10...	.18	<5	--	--	--	--	29
17...	.25	5	--	--	--	--	28
24...	.27	<5	8.7	<.020	--	.005	22
DEC							
01...	.17	<5	--	--	--	--	24
08...	.21	<5	--	--	--	--	22
15...	.54	5	6.8	<.020	.04	<.003	18
22...	.25	<5	--	--	--	--	17
29...	.14	<5	--	--	--	--	21
JAN							
05...	.20	<5	7.3	<.022	.02	<.003	18
FEB							
09...	.20	<5	--	--	--	--	21
16...	.13	<5	--	--	--	--	19
23...	.18	<5	--	--	--	--	20
MAR							
01...	.20	<5	--	--	--	--	18
08...	.18	<5	--	--	--	--	21
15...	.10	<5	--	--	--	--	20
22...	.15	<5	--	--	--	--	20
29...	.19	<5	--	--	--	--	17
APR							
05...	.20	<5	--	--	--	--	24
12...	.18	<5	--	--	--	--	22
19...	.26	<5	8.0	<.020	.02	<.003	20
26...	.18	<5	--	--	--	--	24
MAY							
04...	.16	5	--	--	--	--	24
10...	.11	<5	5.4	<.020	.03	.006	27
17...	.13	<5	--	--	--	--	30
24...	.13	<5	--	--	--	--	21
25...	--	--	10	.070	--	--	23
31...	.14	<5	11	<.020	<.01	.006	20
JUN							
06...	.20	--	11	.000	--	--	23
07...	.14	<5	--	--	--	--	27
13...	.50	--	7.2	.010	--	--	24
14...	.24	10	--	--	--	--	22
20...	--	--	--	--	--	--	--
21...	.18	<5	12	<.020	.02	.008	25
28...	.13	<5	--	--	--	--	30

14138900 NORTH FORK BULL RUN RIVER NEAR MULTNOMAH FALLS, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)
JUL								
05...	1100	29	9.5	32	7.5	2	<1	1
09...	1230	24	10.2	34	7.4	--	--	--
12...	1130	22	10.0	35	7.6	6	2	4
19...	1120	19	10.0	37	--	4	0	3
26...	1140	16	11.0	40	7.6	4	0	3
AUG								
02...	1200	15	10.0	40	7.6	10	1	5
07...	1200	16	9.9	43	7.6	--	--	--
10...	0738	14	9.8	42	7.6	22	10	6
16...	1050	14	9.0	42	7.7	4	0	8
20...	0900	15	--	41	7.5	--	--	--
23...	1120	14	9.5	43	7.7	2	0	8
30...	1120	12	8.5	43	7.7	<1	1	2
SEP								
03...	1000	18	8.5	42	7.3	--	--	--
06...	1140	15	10.0	43	7.6	<1	0	3
13...	1150	14	9.0	44	7.6	<1	0	1
20...	1200	52	10.0	30	7.4	58	39	70
28...	1115	20	9.0	38	7.6	2	1	2

DATE	TUR-BID-ITY (NTU)	COLOR (PLAT-INUM-COBALT UNITS)	SILICA, DIS-SOLVED (MG/L AS SIO2)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
JUL							
05...	.17	<5	--	--	--	--	31
09...	--	--	--	--	--	--	--
12...	.14	<5	15	<.020	.01	.010	30
19...	--	--	--	--	--	--	33
26...	.20	<5	--	--	--	--	10
AUG							
02...	.20	<5	18	<.020	.03	.014	36
07...	--	--	--	--	--	--	--
10...	.17	<5	--	--	--	--	43
16...	.18	<5	--	--	--	--	33
20...	--	--	18	<.002	.00	.002	--
23...	.18	<5	18	<.020	.02	.020	42
30...	.15	<5	--	--	--	--	41
SEP							
03...	--	--	--	--	--	--	--
06...	.14	<5	--	--	--	--	44
13...	.15	<5	18	<.020	.04	.020	39
20...	.56	20	--	--	--	--	33
28...	.19	<5	--	--	--	--	33

14138900 NORTH FORK BULL RUN RIVER NEAR MULTNOMAH FALLS, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)
OCT										
13...	--	<5	--	<5	--	<1	--	2	--	--
NOV										
24...	--	<5	--	<5	--	<1	--	3	--	--
DEC										
15...	--	<5	--	<5	--	<1	--	1	--	--
MAR										
15...	--	<5	--	<5	--	<1	--	<1	--	--
APR										
12...	--	<5	--	<5	--	<1	--	2	--	--
MAY										
17...	--	<5	--	<5	--	<1	--	3	--	--
25...	2	0	9	0	3	1	10	10	<3	0
JUN										
06...	1	1	10	<10	1	0	0	0	<3	0
13...	1	1	9	<10	3	0	0	0	<3	0
14...	--	<5	--	<5	--	<1	--	1	--	--

DATE	COPPER, DIS-SOLVED (UG/L AS CU)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)
OCT										
13...	--	3	--	20	--	1	--	4	--	--
NOV										
24...	--	8	--	39	--	5	--	2	--	--
DEC										
15...	--	12	--	93	--	5	--	3	--	--
MAR										
15...	--	<1	--	26	--	<1	--	2	--	--
APR										
12...	--	3	--	27	--	1	--	2	--	--
MAY										
17...	--	2	--	22	--	<1	--	<1	--	--
25...	9	20	20	110	5	7	3	10	5	<10
JUN										
06...	8	11	<10	60	7	5	2	10	1	2
13...	4	6	30	190	0	2	1	20	0	0
14...	--	3	--	29	--	2	--	<1	--	--

DATE	SILVER, DIS-SOLVED (UG/L AS AG)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SELE-NIUM, TOTAL (UG/L AS SE)	MERCURY DIS-SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)
OCT									
13...	--	<1	--	8	29	--	<5	--	<1.0
NOV									
24...	--	<1	--	13	87	--	<5	--	<1.0
DEC									
15...	--	<1	--	31	220	--	<5	--	<1.0
MAR									
15...	--	<1	--	<1	63	--	<5	--	<1.0
APR									
12...	--	<1	--	4	93	--	<5	--	<1.0
MAY									
17...	--	<1	--	5	53	--	<5	--	<1.0
25...	0	0	50	70	--	0	0	.0	--
JUN									
06...	0	0	20	20	--	0	0	.0	.0
13...	0	0	3	430	--	0	0	.0	.0
14...	--	<1	--	4	93	--	<5	--	--

14138900 NORTH FORK BULL RUN RIVER NEAR MULTNOMAH FALLS, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	PH FIELD (UNITS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SILICA, DIS-SOLVED (MG/L AS SIO2)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)
MAY											
25...	0930	53	6.8	--	27	10	2.8	1.2	1.5	.3	10
JUN											
06...	1100	42	7.7	7.4	26	11	2.3	.8	1.5	.3	11
13...	1330	--	8.1	--	22	7.2	1.7	.8	1.2	.2	3

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, TOTAL (MG/L AS P)
MAY											
25...	.8	.8	.0	.40	.02	.36	.070	.04	.47	.010	.030
JUN											
06...	4.0	.8	.0	.28	.02	1.3	.000	.02	1.3	.000	.010
13...	5.2	2.8	.0	.32	.09	.47	.010	.13	.61	.010	.000

DATE	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	TUR-BID-ITY (NTU)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
MAY										
25...	1.1	.2	12	2	23	24	--	0	.00	100
JUN										
06...	1.4	.0	9	0	23	27	.20	2	.23	50
13...	3.4	.1	8	5	24	21	.50	2	--	39

14138900 NORTH FORK BULL RUN RIVER NEAR MULTNOMAH FALLS, OR--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	25	22	17	23	---	24	24	25	33	42	43
2	43	26	13	18	16	---	24	24	24	33	42	38
3	43	27	15	18	15	---	24	25	24	33	42	41
4	43	25	13	19	17	---	24	26	25	30	42	42
5	43	25	15	17	18	---	21	26	26	32	43	43
6	43	26	16	19	16	25	21	26	27	33	43	44
7	43	27	18	20	16	25	22	27	27	34	43	43
8	43	27	19	20	17	25	21	27	28	35	44	43
9	43	28	19	20	20	26	17	27	29	35	44	44
10	44	29	18	22	22	25	18	27	30	36	45	45
11	44	29	22	22	23	22	19	28	30	36	45	45
12	44	29	22	16	23	23	19	28	30	37	45	45
13	44	30	22	14	24	23	19	29	23	37	45	45
14	42	30	22	14	25	23	18	29	23	38	45	45
15	38	30	19	15	25	23	16	30	24	37	45	45
16	41	29	20	16	24	24	18	30	25	38	45	46
17	41	25	19	16	---	23	18	31	25	38	45	47
18	35	23	19	17	---	21	19	32	26	38	44	46
19	25	23	19	19	---	21	19	32	27	39	44	42
20	24	24	19	20	---	21	18	32	28	39	46	31
21	24	24	18	21	---	22	18	32	28	39	46	31
22	25	23	18	22	---	22	19	29	29	40	46	33
23	24	19	19	22	---	22	20	29	29	39	46	35
24	23	19	20	23	---	23	21	29	30	40	46	36
25	23	18	20	23	---	23	21	27	27	40	46	37
26	24	19	21	24	---	23	22	20	28	40	46	38
27	23	20	21	25	---	22	22	20	29	41	44	39
28	23	21	22	26	---	22	22	22	30	41	43	38
29	23	22	23	26	---	22	22	23	31	41	44	39
30	24	23	23	27	---	23	23	24	33	42	45	38
31	24	---	23	27	---	23	---	26	---	42	41	---
MEAN	34	25	19	20	20	23	20	27	27	37	44	41

14138900 NORTH FORK BULL RUN RIVER NEAR MULTNOMAH FALLS, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	10.0	8.5	7.0	5.5	4.0	3.5	4.5	4.0	2.0	1.0	---	---
2	10.0	8.5	7.0	6.5	5.0	4.0	4.5	4.0	2.5	1.5	---	---
3	10.0	8.5	7.5	7.0	6.0	5.0	4.0	4.0	3.5	2.5	---	---
4	10.0	8.5	7.5	7.0	6.0	5.5	4.5	4.0	3.5	3.0	---	---
5	10.0	8.5	7.5	7.0	5.5	5.5	4.5	3.5	3.5	3.5	---	---
6	9.5	8.5	7.5	7.5	6.0	5.5	3.5	2.5	3.5	3.0	4.0	3.5
7	9.5	9.0	7.5	7.0	6.0	5.5	2.5	1.5	4.0	3.5	4.5	3.5
8	10.0	9.0	7.0	6.0	6.0	6.0	2.0	.0	4.0	3.0	5.0	4.0
9	10.0	8.5	6.5	6.0	6.5	5.5	1.0	.0	4.0	3.0	5.0	4.0
10	9.5	8.0	6.5	6.0	5.5	4.0	1.5	.5	3.5	2.5	5.0	4.5
11	9.5	8.0	6.0	5.5	4.0	3.5	2.0	1.0	3.5	2.5	4.5	3.0
12	9.0	8.0	6.0	5.0	4.0	3.5	3.0	1.0	3.5	2.0	3.5	2.5
13	9.0	8.0	5.5	5.0	4.5	4.0	3.0	2.5	2.0	1.5	3.5	2.5
14	9.0	8.5	5.0	4.5	5.0	4.5	3.5	3.0	2.5	1.5	3.5	2.5
15	10.0	9.0	5.5	4.5	5.5	4.5	3.5	3.0	3.0	2.5	3.0	2.0
16	9.5	9.0	6.0	5.5	4.5	4.0	3.5	3.5	3.5	3.0	3.5	2.5
17	9.0	8.0	6.5	6.0	5.5	4.5	3.5	2.5	---	---	3.5	3.0
18	8.5	8.0	6.0	4.5	6.0	5.5	2.5	2.0	---	---	3.5	3.0
19	8.0	7.5	5.5	4.5	6.0	6.0	2.5	2.0	---	---	4.0	3.5
20	7.5	7.0	5.0	4.5	6.0	6.0	2.5	2.0	---	---	4.5	3.5
21	8.0	7.0	5.0	4.0	6.0	4.5	3.5	2.5	---	---	4.5	4.0
22	8.0	7.5	5.0	4.5	4.5	4.0	3.5	2.5	---	---	4.5	4.0
23	9.0	8.0	5.0	4.5	4.0	3.0	3.5	3.0	---	---	4.0	3.5
24	9.0	8.5	5.0	4.0	4.0	3.5	3.5	3.0	---	---	4.5	3.5
25	9.0	8.5	4.5	4.0	4.5	4.0	3.5	2.5	---	---	5.0	3.5
26	8.5	8.5	4.0	3.5	4.5	4.0	2.5	.5	---	---	4.0	3.0
27	9.0	8.5	4.0	3.5	4.0	3.5	.5	.0	---	---	4.0	2.5
28	8.5	7.5	3.5	3.0	4.0	3.5	.0	.0	---	---	4.5	3.5
29	8.0	7.0	3.5	3.0	4.0	3.5	.5	.0	---	---	4.5	3.0
30	7.5	7.0	4.0	3.5	4.0	3.0	1.0	.0	---	---	4.5	3.0
31	7.0	6.5	---	---	4.5	4.0	2.0	.5	---	---	4.5	3.5
MONTH	10.0	6.5	7.5	3.0	6.5	3.0	4.5	.0	4.0	1.0	5.0	2.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	4.5	3.5	10.0	7.5	8.5	7.5	11.5	9.0	12.0	10.0	10.0	8.5
2	5.0	3.5	9.0	7.5	7.5	7.0	10.5	9.5	10.5	10.0	10.5	9.5
3	5.0	3.5	9.0	6.5	8.0	6.5	9.5	9.0	12.0	9.5	10.5	8.5
4	5.5	4.0	11.0	8.5	9.0	7.0	9.5	9.0	11.5	9.0	10.5	8.5
5	4.5	4.0	10.0	9.0	8.0	7.0	10.0	9.0	10.0	9.0	11.0	9.0
6	4.0	2.0	9.0	8.0	8.5	7.5	11.5	9.0	11.5	9.0	11.0	9.5
7	3.5	2.5	9.5	7.5	9.5	7.5	12.0	9.0	11.5	9.0	10.5	9.5
8	4.0	3.0	8.5	8.0	10.0	8.5	12.0	10.5	11.5	10.0	11.0	8.5
9	3.5	3.0	8.0	7.5	9.5	9.0	11.0	10.0	12.0	9.5	11.5	9.5
10	4.5	3.0	7.5	7.5	10.0	8.5	11.5	9.5	12.0	10.0	11.5	10.0
11	5.0	3.0	7.5	7.5	9.5	8.5	10.0	9.5	12.5	10.5	10.5	9.5
12	6.0	4.0	7.5	7.5	8.5	8.5	10.5	9.5	11.5	10.0	10.5	9.5
13	6.0	4.0	8.0	7.0	8.5	8.0	11.5	9.5	11.5	9.5	9.5	8.5
14	5.0	4.5	7.5	7.0	8.0	7.5	10.5	9.5	10.0	9.5	10.0	8.5
15	5.5	3.0	7.5	6.5	9.5	8.0	12.0	9.5	9.5	9.0	10.0	8.5
16	6.5	4.0	8.0	6.5	9.0	8.5	10.5	9.5	9.5	9.0	10.5	8.5
17	6.5	4.5	9.0	6.5	9.5	8.0	12.0	9.5	10.0	9.0	10.5	9.0
18	7.0	4.5	9.5	7.5	10.5	8.5	11.5	9.5	10.0	9.0	9.5	9.0
19	6.5	6.0	10.0	8.0	11.0	8.5	12.0	9.5	11.0	9.0	10.0	9.0
20	6.0	5.0	10.0	7.0	10.5	9.5	12.5	10.0	11.0	9.0	10.5	9.5
21	5.5	4.5	9.5	8.5	10.5	9.5	13.5	11.0	10.5	8.5	10.0	8.5
22	6.0	4.5	8.5	7.0	10.0	9.0	13.5	11.5	11.0	9.0	9.5	8.0
23	7.0	5.5	7.5	7.0	10.0	9.0	13.0	11.0	11.0	9.0	10.5	9.0
24	7.0	6.0	7.0	6.5	9.5	9.0	12.0	10.5	10.5	9.0	10.0	8.5
25	7.5	5.5	7.0	6.5	10.0	9.0	12.5	10.0	11.0	8.5	10.0	9.0
26	9.0	7.0	6.5	5.0	9.0	8.0	13.0	10.5	10.5	8.5	10.5	9.0
27	10.0	7.5	7.0	5.5	10.0	8.5	13.0	10.5	9.5	9.0	10.0	9.0
28	10.0	7.5	8.0	6.5	10.5	8.0	13.5	11.0	9.5	8.5	10.0	9.0
29	7.5	6.5	8.5	7.5	10.5	8.5	12.5	10.0	10.0	8.0	10.0	9.0
30	8.0	6.0	8.5	7.5	11.0	8.0	12.5	9.5	8.5	8.0	10.5	9.5
31	---	---	8.5	8.0	---	---	12.0	10.0	9.5	8.5	---	---
MONTH	10.0	2.0	11.0	5.0	11.0	6.5	13.5	9.0	12.5	8.0	11.5	8.0

14138900 NORTH FORK BULL RUN RIVER NEAR MULTNOMAH FALLS, OR--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	1	.03	1	.11	3	1.5	2	.69	---	.00	2	.50
2	1	.03	1	.09	42	46	1	.26	---	.00	2	.42
3	1	.03	1	.09	3	1.7	0	.00	---	.00	2	.34
4	1	.02	1	.13	23	32	1	.23	---	.00	2	.33
5	1	.02	1	.14	7	4.1	1	.34	2	.55	2	.32
6	1	.02	1	.11	2	.71	1	.21	5	2.7	1	.14
7	1	.02	1	.09	1	.26	2	.33	3	1.4	1	.13
8	1	.03	1	.08	1	.20	2	.30	0	.00	1	.14
9	1	.02	1	.08	2	.58	2	.29	0	.00	1	.13
10	1	.02	1	.07	1	.31	2	.25	0	.00	2	.31
11	1	.02	1	.07	1	.21	3	.41	0	.00	2	.47
12	1	.02	0	.00	1	.20	97	105	0	.00	1	.18
13	1	.02	0	.00	1	.20	18	19	0	.00	1	.21
14	1	.04	0	.00	1	.23	19	16	0	.00	1	.21
15	1	.06	0	.00	2	.88	7	4.0	0	.00	0	.00
16	1	.03	1	.08	1	.30	3	1.5	0	.00	0	.00
17	1	.03	1	.15	1	.32	3	1.4	0	.00	0	.00
18	2	.25	1	.13	1	.34	2	.57	0	.00	0	.00
19	2	.48	1	.12	1	.30	2	.44	---	.00	0	.00
20	1	.20	1	.11	1	.30	2	.35	---	.00	0	.00
21	1	.15	1	.09	2	.99	---	.00	---	.00	0	.00
22	1	.15	2	.35	1	.36	---	.00	---	.00	0	.00
23	1	.14	1	.22	1	.25	---	.00	---	.00	0	.00
24	1	.17	1	.26	1	.22	---	.00	---	.00	1	.16
25	1	.18	1	.23	1	.18	---	.00	---	.00	1	.15
26	1	.15	1	.17	1	.16	---	.00	---	.00	0	.00
27	2	.36	0	.00	2	.26	---	.00	2	.72	0	.00
28	2	.33	0	.00	1	.12	---	.00	2	.82	0	.00
29	2	.29	0	.00	1	.10	---	.00	2	.65	0	.00
30	1	.14	0	.00	1	.10	---	.17	---	---	0	.00
31	1	.13	---	---	2	.24	---	---	---	---	0	.00
TOTAL	---	3.58	---	2.97	---	93.62	---	151.74	---	6.84	---	4.14

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1	.14	1	.16	0	.00	0	.00	0	.00	0	.00
2	1	.13	1	.15	0	.00	0	.00	0	.00	0	.00
3	1	.14	1	.14	0	.00	0	.00	0	.00	0	.00
4	1	.15	1	.13	0	.00	0	.00	0	.00	0	.00
5	1	.21	1	.13	0	.00	0	.00	0	.00	0	.00
6	1	.21	1	.12	0	.00	0	.00	0	.00	0	.00
7	1	.17	1	.11	0	.00	0	.00	0	.00	0	.00
8	1	.21	1	.11	0	.00	0	.00	0	.00	0	.00
9	2	1.0	1	.12	0	.00	0	.00	0	.00	0	.00
10	1	.39	1	.12	0	.00	0	.00	0	.00	0	.00
11	0	.00	1	.11	0	.00	0	.00	0	.00	0	.00
12	0	.00	1	.11	0	.00	0	.00	0	.00	0	.00
13	0	.00	1	.10	1	.36	0	.00	0	.00	0	.00
14	0	.00	1	.09	1	.25	0	.00	0	.00	0	.00
15	2	1.1	1	.09	0	.00	0	.00	0	.00	0	.00
16	0	.00	1	.09	0	.00	0	.00	0	.00	0	.00
17	0	.00	1	.08	0	.00	0	.00	0	.00	0	.00
18	1	.27	1	.08	0	.00	0	.00	0	.00	0	.00
19	1	.31	1	.08	0	.00	0	.00	0	.00	1	.09
20	1	.33	1	.07	0	.00	0	.00	0	.00	2	.46
21	1	.32	1	.09	0	.00	0	.00	0	.00	0	.00
22	0	.00	2	.23	0	.00	0	.00	0	.00	0	.00
23	0	.00	2	.22	0	.00	0	.00	0	.00	0	.00
24	0	.00	2	.22	0	.00	0	.00	0	.00	0	.00
25	0	.00	5	.76	0	.00	0	.00	0	.00	0	.00
26	0	.00	5	2.2	0	.00	0	.00	0	.00	0	.00
27	0	.00	4	1.4	0	.00	0	.00	0	.00	0	.00
28	0	.00	1	.22	0	.00	0	.00	0	.00	0	.00
29	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
30	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
31	---	---	---	---	---	---	0	.00	0	.00	---	---
TOTAL	---	5.08	---	7.53	---	0.61	---	0.00	---	0.00	---	0.55

14138950 DEER CREEK NEAR BULL RUN, OR

LOCATION.--Lat 45°29'31", long 122°03'27", in SE¼SW¼ sec.10, T.1 S., R.6 E., Multnomah County, Hydrologic Unit 17080001, on left bank 240 ft (73 m) upstream from culvert on Forest Service road S10, 300 ft (91 m) upstream from Bull Run Reservoir Number One, and 9.6 mi (15.4 km) northeast of Bull Run.

DRAINAGE AREA.--1.62 mi² (4.20 km²).

PERIOD OF RECORD.--Chemical analyses: October 1977 to current year.

COOPERATION.--Chemical data were analyzed by the City of Portland Water Quality Laboratory and reviewed by the U.S. Geological Survey.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT							
06...	1240	.66	11.0	31	7.3	6	--
13...	1250	.63	10.0	32	7.3	2	4
22...	1145	5.3	9.0	21	6.9	84	70
27...	1120	7.4	10.0	21	7.2	8	10
NOV							
03...	1115	3.7	8.0	22	7.0	5	5
10...	1035	2.9	6.5	23	7.1	2	1
17...	1130	3.9	--	22	7.1	9	5
24...	1100	26	5.0	16	6.9	12	2
DEC							
01...	1145	6.5	3.5	19	7.1	7	1
08...	1150	13	6.0	18	7.0	2	1
15...	1200	16	6.5	18	7.0	6	2
22...	1215	21	--	17	7.0	6	<1
29...	1135	3.3	4.5	18	7.1	7	1
JAN							
05...	1130	12	5.5	18	7.0	5	<1
FEB							
09...	1140	11	--	17	7.0	5	1
16...	1140	3.1	3.0	18	7.1	2	1
23...	1140	6.7	5.0	18	7.0	2	<1
MAR							
01...	1150	14	6.5	17	7.0	1	<1
08...	1155	8.0	6.0	18	7.0	<1	<1
15...	1130	--	2.4	17	7.0	7	<1
22...	1215	15	5.0	17	7.0	4	<1
29...	1220	15	4.5	18	7.0	13	1
APR							
05...	1150	5.4	6.0	19	7.2	8	<1
12...	1210	15	7.5	18	7.1	3	<1
19...	1210	--	8.0	19	7.0	4	<1
26...	1215	6.5	9.0	19	7.1	1	<1
MAY							
04...	1210	3.4	7.5	20	7.1	2	<1
10...	1015	--	7.5	25	7.1	25	19
17...	1005	--	6.6	21	7.3	24	1
24...	1145	2.0	7.5	25	7.1	8	13
31...	1240	5.6	9.0	23	7.3	5	3
JUN							
07...	1205	4.6	10.0	23	7.1	6	3
14...	1220	15	8.5	22	7.1	7	2
21...	1210	4.2	11.0	21	7.2	3	<1
28...	1230	--	11.0	20	7.2	3	1
JUL							
05...	1140	2.4	11.0	23	7.3	7	<1
12...	1210	1.8	13.0	23	7.3	10	<1
19...	1150	1.3	13.5	25	7.3	12	2
26...	1200	1.1	15.0	27	7.4	16	4

14138950 DEER CREEK NEAR BULL RUN, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)	TUR-BID-ITY (NTU)	COLOR (PLAT-INUM COBALT UNITS)	SILICA, DIS-SOLVED (MG/L AS SIO2)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS P)
OCT							
06...	1	.10	<5	--	--	--	--
13...	2	.10	<5	12	<.020	<.01	<.003
22...	12	.12	<5	--	--	--	--
27...	7	.20	10	--	--	--	--
NOV							
03...	<1	.14	<5	--	--	--	--
10...	1	.13	<5	--	--	--	--
17...	2	.15	5	--	--	--	--
24...	3	.14	<5	6.7	<.020	.04	<.003
DEC							
01...	<1	.13	<5	--	--	--	--
08...	1	.14	<5	--	--	--	--
15...	1	.18	<5	6.6	<.020	.04	<.003
22...	--	.16	<5	--	--	--	--
29...	<1	.11	<5	--	--	--	--
JAN							
05...	1	.17	<5	6.4	<.002	.03	<.003
FEB							
09...	<1	.12	<5	--	--	--	--
16...	9	.11	<5	--	--	--	--
23...	<1	.15	<5	--	--	--	--
MAR							
01...	<1	.14	<5	--	--	--	--
08...	<1	.12	<5	--	--	--	--
15...	5	.13	<5	--	--	--	--
22...	1	.14	<5	--	--	--	--
29...	--	.28	<5	--	--	--	--
APR							
05...	<1	.19	<5	--	--	--	--
12...	<1	.15	<5	--	--	--	--
19...	1	.21	<5	5.6	<.020	.01	<.003
26...	1	.13	<5	--	--	--	--
MAY							
04...	1	.13	<5	--	--	--	--
10...	7	.16	<5	3.0	<.020	.03	<.003
17...	5	.11	<5	--	--	--	--
24...	6	.14	<5	--	--	--	--
31...	5	.16	<5	7.3	<.020	<.01	.052
JUN							
07...	8	.19	<5	--	--	--	--
14...	16	.20	<5	--	--	--	--
21...	3	.21	<5	7.8	<.020	.01	<.003
28...	8	.19	<5	--	--	--	--
JUL							
05...	17	.18	<5	--	--	--	--
12...	11	.13	<5	9.3	<.020	<.01	<.003
19...	12	.13	<5	--	--	--	--
26...	19	.13	<5	--	--	--	--

14138950 DEER CREEK NEAR BULL RUN, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
AUG							
02...	1220	.91	15.0	27	7.4	16	3
10...	0757	.87	13.2	29	7.2	32	27
16...	1125	.76	13.0	29	7.4	4	3
23...	1200	.69	12.0	30	7.4	16	3
30...	1200	.69	11.0	31	7.4	<1	1
SEP							
06...	1210	.95	12.0	31	7.4	6	3
13...	--	.87	11.0	32	7.4	<1	1
13...	0913	.87	11.0	32	7.4	<1	1
20...	1230	3.3	11.0	28	7.3	14	14
28...	1140	1.8	11.5	28	7.5	8	3

DATE	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)	TUR-BID-ITY (NTU)	COLOR (PLAT-INUM COBALT UNITS)	SILICA, DIS-SOLVED (MG/L AS SIO2)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS P)
AUG							
02...	36	.13	<5	11	<.020	.03	<.003
10...	24	.08	<5	--	--	--	--
16...	17	.12	<5	--	--	--	--
23...	19	.08	<5	11	<.020	.02	<.003
30...	9	.11	<5	--	--	--	--
SEP							
06...	11	.12	<5	--	--	--	--
13...	5	.09	<5	11	<.020	.02	<.003
13...	4	.09	<5	11	<.020	.02	<.003
20...	25	.18	10	--	--	--	--
28...	0	.12	<5	--	--	--	--

14138960 COUGAR CREEK NEAR BULL RUN, OR

LOCATION.--Lat 45°29'28", long 122°03'40", in SW¼SW¼ sec.10, T.1 S., R.6 E., Multnomah County, Hydrologic Unit 17080001, Mount Hood National Forest, at culvert on Forest Service road S10, 300 ft (91 m) upstream from Bull Run Reservoir Number One, and 9.4 mi (15.1 km) northeast of Bull Run.

DRAINAGE AREA.--3.06 mi² (7.93 km²).

PERIOD OF RECORD.--Chemical analyses: October 1977 to current year.

COOPERATION.--Chemical data were analyzed by the City of Portland Water Quality Laboratory and reviewed by the U.S. Geological Survey.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)
OCT								
06...	1250	.73	12.0	22	7.0	<1	--	1
13...	1300	16	11.0	23	7.0	<1	1	5
22...	1155	9.6	8.0	17	6.9	52	8	3
27...	1130	15	9.0	16	7.0	10	7	7
NOV								
03...	1130	11	7.5	17	6.9	3	3	1
10...	1050	9.6	6.5	17	6.9	1	<1	<1
17...	1135	13	7.0	17	7.0	5	1	3
24...	1150	33	4.5	16	6.9	9	<1	2
DEC								
01...	1155	16	3.5	17	7.0	3	<1	2
08...	1200	33	6.0	17	7.0	3	<1	1
15...	1215	39	5.5	15	6.9	1	2	1
22...	1225	39	--	15	6.9	4	1	--
29...	1145	18	4.5	17	7.1	2	<1	<1
JAN								
05...	1140	43	5.0	15	7.0	11	<1	1
FEB								
09...	1150	37	--	16	7.0	2	<1	<1
16...	1150	18	4.0	18	7.1	2	1	0
23...	1145	26	5.0	16	7.0	2	<1	16
MAR								
01...	1155	--	--	15	--	<1	<1	<1
08...	1200	25	5.5	16	7.0	1	1	1
15...	1140	27	2.4	17	7.0	3	<1	1
22...	1220	27	5.0	17	6.9	2	<1	1
29...	1220	27	4.0	19	6.9	1	1	2
APR								
05...	1200	33	5.5	18	7.1	5	<1	<1
12...	1215	--	8.0	17	7.0	1	<1	<1
19...	1240	--	6.5	18	7.0	2	<1	1
26...	1215	27	8.0	16	7.0	<1	<1	1
MAY								
04...	1220	14	8.0	17	7.0	<1	<1	1
10...	1025	12	6.8	21	7.0	5	1	2
17...	1015	8.7	6.2	19	7.0	17	<1	2
24...	1150	9.0	7.0	20	7.0	8	3	2
31...	1245	14	8.0	19	7.0	2	1	1
JUN								
07...	1210	14	9.0	19	7.0	3	<1	4
14...	1225	1.0	7.5	19	7.0	7	2	7
21...	1215	13	10.5	18	7.0	2	<1	6
28...	1235	--	10.5	18	7.1	7	1	3
JUL								
05...	1145	9.3	10.0	18	7.2	15	1	6
09...	1100	--	11.5	19	7.4	--	--	--
12...	1250	7.2	12.0	19	7.1	4	1	6
19...	1200	2.9	13.0	21	7.1	12	1	7

14138960 COUGAR CREEK NEAR BULL RUN, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TUR-BIO-ITY (NTU)	COLOR (PLAT-INUM COBALT UNITS)	SILICA, DIS-SOLVED (MG/L AS SIO2)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS P)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT								
06...	.10	<5	--	--	--	--	23	.05
13...	.09	<5	9.7	<.020	.10	<.003	24	1.01
22...	.10	<5	--	--	--	--	16	.42
27...	.14	10	--	--	--	--	18	.71
NOV								
03...	.11	<5	--	--	--	--	17	.48
10...	.11	<5	--	--	--	--	18	.47
17...	.13	5	--	--	--	--	19	.65
24...	.14	<5	5.9	<.020	.02	<.003	16	1.44
DEC								
01...	.12	<5	--	--	--	--	14	.61
08...	.14	<5	--	--	--	--	18	1.57
15...	.20	<5	5.3	<.020	.03	<.003	16	1.65
22...	.16	<5	--	--	--	--	12	1.23
29...	.13	5	--	--	--	--	13	.65
JAN								
05...	.14	<5	5.6	<.020	.02	<.003	14	1.64
FEB								
09...	.10	<5	--	--	--	--	15	1.53
16...	.01	<5	--	--	--	--	12	.57
23...	.09	<5	--	--	--	--	14	.99
MAR								
01...	--	<5	--	--	--	--	13	--
08...	.10	<5	--	--	--	--	14	.94
15...	.10	<5	--	--	--	--	15	1.08
22...	.09	<5	--	--	--	--	15	1.08
29...	.16	<5	--	--	--	--	9	.67
APR								
05...	.10	<5	--	--	--	--	38	3.35
12...	.11	<5	--	--	--	--	17	--
19...	.14	<5	6.2	<.020	<.01	<.003	16	--
26...	.10	<5	--	--	--	--	17	1.24
MAY								
04...	.10	<5	--	--	--	--	14	.55
10...	.12	<5	3.7	<.020	<.03	<.003	17	.52
17...	.12	<5	--	--	--	--	17	.41
24...	.09	<5	--	--	--	--	17	.40
31...	.10	<5	6.0	<.020	<.01	.003	14	.55
JUN								
07...	.12	<5	--	--	--	--	17	.62
14...	.12	<5	--	--	--	--	15	.04
21...	.11	<5	7.1	<.020	.01	<.003	15	.50
28...	.11	<5	--	--	--	--	--	--
JUL								
05...	.10	<5	--	--	--	--	19	.48
09...	--	--	--	--	--	--	--	--
12...	.12	<5	8.3	<.020	.02	<.003	18	.35
19...	.13	<5	--	--	--	--	17	.13

14138960 COUGAR CREEK NEAR BULL RUN, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)
JUL								
26...	1215	1.8	14.0	22	7.2	14	1	--
AUG								
02...	1230	--	--	22	--	12	3	26
07...	1000	--	11.6	22	6.9	--	--	--
10...	0807	1.1	12.5	24	7.1	32	4	14
16...	1135	.97	12.0	24	7.2	2	1	19
20...	1045	--	11.4	23	7.2	--	--	--
23...	1210	.97	13.0	24	7.1	8	6	12
30...	1210	.93	11.0	24	7.1	7	3	6
SEP								
03...	0840	--	9.2	23	6.8	--	--	--
06...	1220	1.3	13.0	24	7.1	4	3	13
13...	1220	1.2	11.0	24	7.1	4	1	38
20...	1240	11	10.0	21	7.0	14	11	34
28...	1150	3.4	11.0	22	7.1	4	1	7

DATE	TUR-BIO-ITY (NTU)	COLOR (PLAT-INUM COBALT UNITS)	SILICA, DIS-SOLVED (MG/L AS SIO2)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS P)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)
JUL								
26...	.14	<5	--	--	--	--	--	--
AUG								
02...	--	<5	9.5	<.020	.09	<.003	19	--
07...	--	--	--	--	--	--	--	--
10...	.09	<5	--	--	--	--	26	.08
16...	.10	<5	--	--	--	--	17	.04
20...	.50	--	9.6	<.002	.01	<.000	--	--
23...	.10	<5	9.8	<.020	.05	<.003	25	.07
30...	.09	<5	--	--	--	--	24	.06
SEP								
03...	--	--	--	--	--	--	--	--
06...	.11	<5	--	--	--	--	27	.10
13...	.09	<5	9.8	<.020	.05	.020	21	.07
20...	.15	5	--	--	--	--	21	.63
28...	.09	<5	--	--	--	--	18	.16

14138990 BEAR CREEK NEAR BULL RUN, OR

LOCATION.--Lat 45°29'18", long 122°04'58", in NW¼NW¼ sec.16, T.1 S., R.6 E., Multnomah County, Hydrologic Unit 17080001, Mount Hood National Forest, at culvert on Forest Service road S10, 400 ft (122 m) upstream from Bull Run Reservoir Number One, and 8.3 mi (13.4 km) northeast of Bull Run.

DRAINAGE AREA.--1.68 mi² (4.35 km²).

PERIOD OF RECORD.--Chemical analyses: October 1977 to current year.

COOPERATION.--Chemical data were analyzed by the City of Portland Water Quality Laboratory and reviewed by the U.S. Geological Survey.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)
OCT								
06...	1305	.22	12.0	19	7.2	<1	--	3
13...	1310	.25	11.5	19	7.1	7	<1	4
22...	1210	2.7	8.5	18	6.8	50	0	8
27...	1140	3.9	9.5	19	7.2	5	5	3
NOV								
03...	1145	2.7	8.0	18	7.0	4	<1	2
10...	1055	2.4	7.0	18	7.0	5	1	3
17...	1145	3.1	8.5	18	7.0	5	7	4
24...	1200	11	5.0	18	7.0	8	3	2
DEC								
01...	1205	5.3	4.0	18	7.1	1	1	30
08...	1215	16	6.5	17	7.0	5	1	<1
15...	1225	15	6.5	18	7.0	<1	1	<1
22...	1235	22	--	16	7.0	3	1	--
29...	1155	7.3	5.0	17	7.1	3	<1	<1
JAN								
05...	1200	17	5.5	18	7.0	9	1	<1
FEB								
09...	1220	17	--	16	7.1	2	2	4
16...	1205	1.8	4.0	17	7.0	1	<1	<1
23...	1155	9.1	5.5	17	7.0	2	<1	<1
MAR								
01...	1205	13	6.5	18	7.1	3	<1	<1
08...	1215	7.7	6.0	17	7.1	<1	<1	<1
15...	1150	14	2.6	17	7.2	5	<1	2
22...	1230	12	5.0	17	7.0	2	<1	1
29...	1230	12	5.0	18	6.9	12	<1	4
APR								
05...	1210	7.7	6.0	18	7.1	5	<1	<1
12...	1255	17	7.5	18	7.1	3	<1	<1
19...	1230	17	7.0	17	7.1	3	<1	<1
26...	1235	12	8.0	17	7.1	<1	<1	1
MAY								
04...	1230	5.6	7.5	18	7.1	3	1	1
10...	1033	2.4	7.4	21	7.1	19	<1	1
17...	1027	1.6	6.4	19	7.0	6	<1	1
24...	1200	1.5	7.0	20	7.1	8	1	1
31...	1255	7.7	8.0	20	7.1	1	<1	1
JUN								
07...	1220	5.9	9.0	20	7.2	4	1	6
14...	1235	16	8.0	20	7.1	3	3	5
21...	1225	5.9	9.5	18	7.2	4	1	6
28...	1245	3.9	10.0	18	7.1	9	<1	3
JUL								
05...	1155	2.4	10.0	19	7.2	7	1	7
12...	1230	1.5	11.5	19	7.2	22	6	11
19...	1210	1.1	12.0	19	7.2	16	1	14
26...	1225	.70	14.0	20	7.2	10	6	26

14138990 BEAR CREEK NEAR BULL RUN, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TUR-BID-ITY (NTU)	COLOR (PLAT-INUM COBALT UNITS)	SILICA, DIS-SOLVED (MG/L AS SIO2)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS P)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT								
06...	.10	<5	--	--	--	--	20	.01
13...	.09	<5	8.2	<.020	.06	<.003	21	.01
22...	.09	<5	--	--	--	--	18	.13
27...	.11	10	--	--	--	--	22	.23
NOV								
03...	.14	<5	--	--	--	--	18	.13
10...	.12	<5	--	--	--	--	20	.13
17...	.15	5	--	--	--	--	25	.21
24...	.18	<5	7.1	<.020	.05	<.003	18	.52
DEC								
01...	.11	<5	--	--	--	--	16	.23
08...	.14	<5	--	--	--	--	18	.75
15...	.13	<5	6.9	<.020	.04	<.003	18	.71
22...	.16	<5	--	--	--	--	--	--
29...	.12	<5	--	--	--	--	15	.29
JAN								
05...	.13	<5	6.8	.020	.03	<.003	17	.78
FEB								
09...	.14	<5	--	--	--	--	15	.70
16...	.10	<5	--	--	--	--	12	.06
23...	.10	<5	--	--	--	--	16	.38
MAR								
01...	.12	<5	--	--	--	--	16	.53
08...	.11	<5	--	--	--	--	15	.30
15...	.10	<5	--	--	--	--	14	.52
22...	.12	<5	--	--	--	--	15	.48
29...	.19	<5	--	--	--	--	9	.27
APR								
05...	.14	<5	--	--	--	--	18	.38
12...	.12	<5	--	--	--	--	18	.80
19...	.13	<5	6.4	<.020	<.01	<.003	16	.71
26...	.12	<5	--	--	--	--	17	.52
MAY								
04...	.15	<5	--	--	--	--	15	.22
10...	.10	<5	3.3	<.020	.02	.003	18	.11
17...	.10	<5	--	--	--	--	17	.08
24...	.18	<5	--	--	--	--	18	.07
31...	.13	<5	6.9	<.020	<.01	<.003	15	.31
JUN								
07...	.12	<5	--	--	--	--	18	.28
14...	.18	<5	--	--	--	--	16	.70
21...	.14	<5	7.2	<.020	.01	<.003	14	.22
28...	.11	<5	--	--	--	--	18	.19
JUL								
05...	.13	<5	--	--	--	--	18	.12
12...	.11	<5	8.0	<.020	.01	<.003	16	.07
19...	.12	<5	--	--	--	--	15	.04
26...	.12	<5	--	--	--	--	21	.04

14138990 BEAR CREEK NEAR BULL RUN, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	SPE-C1F1C CON-DUCT-ANCE (M1CRO-MHOS)	PH F1ELD (UN1TS)	COL1-FORM, TOTAL, 1MMED. (COLS. PER 100 ML)	COL1-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)
AUG								
02...	1240	.64	13.0	19	7.2	0	6	23
10...	0820	.52	12.6	20	7.1	6	0	38
16...	1145	--	12.0	20	7.2	6	2	21
23...	1220	.43	12.0	21	7.2	--	--	--
30...	1220	.43	11.0	21	7.2	48	36	9
SEP								
06...	1230	.52	16.5	21	7.1	38	28	17
13...	1230	.52	11.0	21	7.1	12	7	2
20...	1250	1.8	10.0	22	7.1	16	5	25
28...	1200	.92	11.0	21	7.1	2	6	9

DATE	TUR-B1D-1TY (NTU)	COLOR (PLAT-1NUM COBALT UNITS)	S1L1CA, D1S-SOLVED (MG/L AS S102)	N1TRO-GEN, AMMON1A TOTAL (MG/L AS N)	N1TRO-GEN, N1TRATE TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS P)	SOL1DS, RES1DUE AT 180 DEG. C D1S-SOLVED (MG/L)	SOL1DS, D1S-SOLVED (TONS PER DAY)
AUG								
02...	.13	<5	8.5	<.020	.03	<.003	17	.03
10...	.08	<5	--	--	--	--	21	.03
16...	.09	<5	--	--	--	--	13	--
23...	.09	<5	8.4	<.020	.02	<.003	19	.02
30...	.10	<5	--	--	--	--	20	.02
SEP								
06...	.10	<5	--	--	--	--	22	.03
13...	.18	<5	8.9	<.020	.04	<.003	19	.03
20...	.14	5	--	--	--	--	23	.11
28...	.10	<5	--	--	--	--	18	.04

14139000 BULL RUN RESERVOIR NUMBER ONE NEAR BULL RUN, OR

LOCATION.--Lat 45°28'50", long 122°04'50", in NW¼SW¼ sec.16, T.1 S., R.6 E., Multnomah County, Hydrologic Unit 17080001, in Mount Hood National Forest, in control house of Bear Creek Dam on Bull Run River, 8.2 mi (13.2 km) northeast of Bull Run, and at mile 11.2 (18.0 km).

DRAINAGE AREA.--74.6 mi² (193.0 km²).

PERIOD OF RECORD.--October 1928 to current year. Prior to October 1937, published as Bull Run Reservoir. October 1937 to September 1967, published as Lake Ben Morrow. Prior to October 1975, monthend contents only.

REVISED RECORDS.--WSP 814: 1935(M). WSP 1935: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Portland Water Bureau). Prior to Oct. 9, 1930, nonrecording gage, Oct. 9, 1930, to Sept. 30, 1962, water-stage recorder at present site and datum, and Oct. 1, 1962, to Dec. 31, 1975, nonrecording gage at present site and datum.

REMARKS.--Lake is formed by concrete dam completed in March 1929 for water supply of city of Portland. Storage began about Apr. 29, 1929; first filling occurred May 15, 1929. Capacity, 26,930 acre-ft (33.2 hm³) at crest of spillway, elevation, 1,036.0 ft (315.77 m); capacity increased in October 1954 to 30,140 acre-ft (37.2 hm³) at elevation 1,044.0 ft (318.21 m) by installation of three gates 40 ft (12 m) wide and 8 ft (2.4 m) high. No dead storage. Water is used for power generation by Portland General Electric Co. and municipal supply for city of Portland.

COOPERATION.--Capacity table furnished by Portland Water Bureau.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 31,600 acre-ft (39.0 hm³) Mar. 31, 1931, elevation, 1,047.40 ft (319.248 m); minimum observed, 169 acre-ft (208,000 m³) Jan. 10, 1960, elevation, 887.5 ft (270.51 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 31,310 acre-ft (38.6 hm³) May 6, elevation, 1,046.73 ft (319.043 m); minimum, 10,230 acre-ft (12.6 hm³) Oct. 16, elevation, 980.79 ft (298.945 m).

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1015.43	1034.89	1040.30	1037.50	1037.20	1037.90	1037.20	1037.30	1045.67	1045.07	1029.59	1008.65
2	1015.80	1034.43	1040.50	1037.80	1037.70	1037.60	1037.16	1037.20	1045.82	1044.77	1028.78	1008.45
3	1015.97	1034.08	1039.90	1037.70	1038.20	1037.50	1037.16	1037.20	1045.56	1044.46	1028.00	1007.72
4	1014.46	1035.03	1039.70	1037.50	1038.10	1037.50	1037.21	1037.20	1045.18	1044.41	1027.22	1006.89
5	1010.67	1037.07	1038.80	1037.50	1037.90	1037.40	1037.62	1038.60	1044.97	1044.19	1026.42	1005.96
6	1006.20	1037.32	1036.70	1037.50	1038.60	1037.30	1037.56	1040.30	1045.01	1043.93	1025.64	1005.00
7	1001.51	1037.20	1034.10	1037.40	1038.40	1037.20	1037.41	1041.40	1045.07	1043.66	1024.74	1004.21
8	996.58	1036.80	1031.80	1037.30	1037.90	1037.20	1037.77	1041.60	1044.96	1043.28	1023.73	1003.25
9	992.45	1036.80	1029.50	1037.10	1037.60	1037.20	1038.80	1041.70	1044.92	1043.04	1022.77	1002.26
10	989.17	1036.70	1032.40	1037.00	1037.20	1037.40	1038.29	1041.80	1044.91	1043.02	1021.83	1001.25
11	986.34	1036.70	1034.00	1037.90	1037.10	1037.40	1037.94	1042.10	1044.93	1043.03	1020.82	1000.23
12	984.26	1036.70	1033.40	1039.40	1037.10	1037.50	1037.98	1042.60	1045.20	1043.03	1019.81	999.23
13	982.40	1036.70	1034.60	1040.00	1037.00	1037.50	1038.17	1043.30	1045.94	1043.01	1018.75	998.17
14	981.10	1036.60	1034.60	1039.70	1036.90	1037.40	1042.48	1043.94	1044.92	1042.88	1017.74	997.15
15	980.97	1036.50	1034.70	1038.90	1037.10	1037.30	1044.21	1044.43	1044.74	1042.63	1016.75	996.36
16	980.86	1036.60	1034.80	1038.40	1037.20	1037.20	1040.69	1044.77	1044.88	1042.20	1015.74	995.81
17	981.15	1036.80	1034.90	1038.20	1037.40	1037.50	1037.90	1045.02	1045.30	1041.68	1014.94	995.26
18	984.17	1037.00	1036.00	1038.00	1037.60	1037.70	1037.90	1045.24	1045.47	1041.06	1014.76	994.78
19	991.88	1036.90	1036.50	1037.70	1037.90	1037.70	1038.00	1045.01	1045.29	1040.47	1013.86	995.00
20	998.24	1036.90	1036.50	1037.40	1037.80	1037.70	1038.20	1045.04	1045.27	1039.88	1012.46	998.67
21	1002.83	1037.10	1036.90	1037.20	1037.50	1037.50	1038.00	1045.29	1045.25	1039.22	1011.27	1001.18
22	1006.66	1037.40	1036.90	1037.10	1037.40	1037.40	1037.70	1045.52	1045.17	1038.48	1010.79	1002.25
23	1011.16	1037.70	1036.30	1037.10	1037.30	1037.40	1037.60	1045.47	1045.20	1037.51	1011.24	1002.84
24	1014.88	1037.70	1035.60	1037.00	1037.30	1037.30	1037.60	1045.45	1045.39	1036.45	1011.68	1003.26
25	1018.45	1037.50	1034.80	1037.00	1038.00	1037.20	1037.60	1045.95	1045.42	1035.62	1011.99	1003.51
26	1021.39	1037.30	1033.50	1036.90	1038.50	1037.30	1037.60	1045.92	1045.25	1034.95	1012.16	1003.67
27	1025.06	1037.10	1034.10	1036.90	1038.50	1037.30	1037.70	1044.16	1045.26	1034.26	1012.42	1003.74
28	1028.57	1037.00	1035.30	1036.80	1038.40	1037.30	1037.60	1044.84	1045.29	1033.62	1011.96	1003.87
29	1031.68	1036.90	1035.90	1036.70	1038.20	1037.30	1037.40	1045.32	1045.25	1032.59	1010.97	1003.91
30	1034.53	1038.20	1036.60	1036.70	---	1037.30	1037.30	1045.25	1045.00	1031.28	1010.03	1004.09
31	1035.58	---	1037.10	1036.80	---	1037.30	---	1045.27	---	1030.36	1009.43	---
MEAN	1004.53	1036.72	1035.70	1037.62	1037.69	1037.41	1038.19	1043.04	1045.22	1040.13	1017.69	1001.89
MAX	1035.58	1038.20	1040.50	1040.00	1038.60	1037.90	1044.21	1045.95	1045.94	1045.07	1029.59	1008.65
MIN	980.86	1034.08	1029.50	1036.70	1036.90	1037.20	1037.16	1037.20	1044.74	1030.36	1009.43	994.78
(†)	26770	27790	27360	27240	27790	27440	27440	30690	30570	24810	17770	16180
(‡)	+7230	+1020	-430	-120	+550	-350	0	+3250	-120	-5760	-7040	-1590

CAL YR 1979 MEAN 1032.16 MAX 1045.39 MIN 980.86 AC-FT‡ +80
WTR YR 1980 MEAN 1031.29 MAX 1045.95 MIN 980.86 AC-FT‡ -3360

† Contents in acre-feet, at 2400, on last day of month.
‡ Change in contents, in acre-feet.

14139510 FIVEMILE CREEK NEAR BULL RUN, OR

LOCATION.--Lat 45°28'57", long 122°05'25", in SW¼NE¼ sec.17, T.1 S., R.6 E., Multnomah County, Hydrologic Unit 17080001, Mount Hood National Forest, at culvert on Forest Service road S10, 800 ft (244 m) upstream from Bull Run Reservoir Number Two, and 7.9 mi (12.7 km) northeast of Bull Run.

DRAINAGE AREA.--0.79 mi² (2.05 km²).

PERIOD OF RECORD.--Chemical analyses: October 1977 to current year.

COOPERATION.--Chemical data were analyzed by the City of Portland Water Quality Laboratory and reviewed by the U.S. Geological Survey.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)
OCT								
22...	1235	2.0	8.5	17	6.8	86	62	12
27...	1210	2.5	10.0	22	7.2	16	19	4
NOV								
03...	1220	2.1	8.5	19	7.1	8	4	<1
10...	1130	1.8	7.5	19	7.0	8	1	<1
17...	1215	1.7	8.0	19	7.1	6	2	2
24...	1230	8.1	5.0	18	7.1	7	3	1
DEC								
01...	1235	4.5	5.0	18	7.1	10	<1	2
08...	1240	10	7.0	18	7.0	4	1	1
15...	1250	6.9	7.0	18	7.0	1	1	1
22...	1305	15	--	17	7.0	3	<1	--
29...	1220	--	6.0	18	7.1	4	<1	<1
JAN								
05...	1230	13	6.0	18	7.1	3	<1	<1
19...	1005	13	4.0	17	7.0	9	<1	2
26...	1130	4.6	2.5	17	7.1	4	<1	<1
FEB								
02...	1035	11	4.0	18	7.1	12	5	1
09...	1240	14	--	16	7.1	5	<1	<1
16...	1245	4.3	4.0	17	7.1	2	1	<1
23...	1235	6.9	6.0	17	7.0	3	<1	<1
MAR								
01...	1245	9.0	7.0	17	7.1	2	<1	<1
08...	1245	5.4	6.0	18	7.0	1	<1	<1
15...	1225	16	4.4	17	7.2	1	1	<1
22...	1250	13	6.0	17	7.0	2	<1	1
29...	1300	11	5.0	18	7.0	12	<1	4
APR								
05...	1230	5.0	6.5	18	7.1	5	<1	<1
12...	1255	6.2	7.5	18	7.1	1	1	1
19...	1300	2.0	8.0	19	--	2	<1	<1
26...	1300	1.6	9.0	19	7.1	6	4	1
MAY								
04...	0920	1.1	9.0	21	7.1	4	<1	<1
10...	1045	1.2	7.4	23	7.1	25	<1	8
17...	1032	.70	7.2	21	7.0	19	<1	3
24...	1230	.81	7.5	22	7.1	7	<1	4
JUN								
02...	0950	2.5	8.5	21	7.1	4	<1	1
07...	1255	1.7	9.0	21	7.2	5	<1	5
14...	1300	4.6	8.0	21	7.1	5	1	4
21...	1300	1.8	10.0	18	7.2	6	<1	6
28...	1315	1.4	10.0	19	7.1	9	<1	8
JUL								
05...	1230	1.8	11.0	19	7.1	20	23	20
12...	1300	.70	11.5	20	7.0	8	2	12
19...	1245	.47	12.0	20	7.1	6	2	9

14139510 FIVEMILE CREEK NEAR BULL RUN, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TUR-BIO-ITY (NTU)	COLOR (PLAT-INUM COBALT UNITS)	SILICA, DIS-SOLVED (MG/L AS SIO2)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS P)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT								
22...	.16	<5	--	--	--	--	--	--
27...	.18	10	--	--	--	--	--	--
NOV								
03...	.16	<5	--	--	--	--	--	--
10...	.18	<5	--	--	--	--	--	--
17...	.12	<5	--	--	--	--	--	--
24...	.26	<5	7.1	<.020	.03	.003	--	--
DEC								
01...	.14	<5	--	--	--	--	--	--
08...	.18	<5	--	--	--	--	--	--
15...	.19	<5	7.2	<.020	.02	<.003	--	--
22...	.19	<5	--	--	--	--	13	.54
29...	.14	<5	--	--	--	--	--	--
JAN								
05...	.20	<5	7.0	<.020	.01	.009	--	--
19...	.17	<5	--	--	--	--	--	--
26...	.11	<5	7.3	<.020	.02	.003	--	--
FEB								
02...	.25	<5	--	--	--	--	--	--
09...	.17	<5	--	--	--	--	--	--
16...	.10	<5	--	--	--	--	--	--
23...	.13	<5	--	--	--	--	--	--
MAR								
01...	.15	<5	--	--	--	--	--	--
08...	.12	<5	--	--	--	--	--	--
15...	.13	<5	--	--	--	--	--	--
22...	.16	5	--	--	--	--	--	--
29...	.29	<5	--	--	--	--	--	--
APR								
05...	.16	<5	--	--	--	--	--	--
12...	.14	<5	--	--	--	--	--	--
19...	.17	<5	7.5	<.020	.01	<.003	--	--
26...	.16	<5	--	--	--	--	--	--
MAY								
04...	.12	<5	--	--	--	--	--	--
10...	.13	<5	3.6	<.020	.02	<.003	--	--
17...	.14	<5	--	--	--	--	--	--
24...	.15	<5	--	--	--	--	--	--
JUN								
02...	.17	<5	7.6	<.020	.01	.003	--	--
07...	.17	<5	--	--	--	--	--	--
14...	.24	<5	--	--	--	--	--	--
21...	.16	<5	7.9	<.020	.01	<.003	--	--
28...	.15	<5	--	--	--	--	--	--
JUL								
05...	.13	<5	--	--	--	--	--	--
12...	.14	<5	8.6	<.020	.02	<.003	--	--
19...	.11	<5	--	--	--	--	--	--

14139510 FIVEMILE CREEK NEAR BULL RUN, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
JUL							
26...	1255	.22	14.0	21	7.1	8	6
AUG							
03...	1200	.22	13.0	21	7.1	22	5
10...	0834	.20	13.3	22	7.0	12	4
16...	1205	--	12.5	21	7.0	36	23
23...	1240	.13	12.5	22	7.0	8	12
30...	1250	.10	11.0	23	7.0	14	9
SEP							
06...	1245	.11	12.5	23	7.0	2	4
13...	1250	.11	11.0	23	7.0	<1	2
20...	1300	.70	11.0	22	7.0	60	40
23...	1230	.38	--	--	--	--	--
28...	1230	.38	11.5	23	7.0	2	5

DATE	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)	TUR-BID-ITY (NTU)	COLOR (PLAT-INUM COBALT UNITS)	SILICA, DIS-SOLVED (MG/L AS SIO2)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS P)
JUL							
26...	17	.13	--	--	--	--	--
AUG							
03...	33	.11	<5	9.3	<.020	.04	<.003
10...	25	.09	<5	--	--	--	--
16...	28	.12	<5	--	--	--	--
23...	15	.10	<5	9.2	<.020	.04	<.003
30...	15	.11	<5	--	--	--	--
SEP							
06...	16	.10	<5	--	--	--	--
13...	5	.11	<5	9.3	<.020	.05	.009
20...	30	.20	<5	--	--	--	--
23...	--	--	--	--	--	--	--
28...	0	.12	<5	--	--	--	--

14139600 CAMP CREEK NEAR BULL RUN, OR

LOCATION.--Lat 45°27'41", long 122°06'13", in SW¼SW¼ sec.20, T.1 S., R.6 E., Multnomah County, Hydrologic Unit 17080001, Mount Hood National Forest, 15 ft (4.6 m) downstream from falls at confluence with West Branch of Camp Creek, 0.3 mi (0.5 km) upstream from Bull Run Reservoir Number Two, and 6.6 mi (10.6 km) northeast of Bull Run.

DRAINAGE AREA.--3.27 mi² (8.47 km²).

PERIOD OF RECORD.--Chemical analyses: October 1977 to current year.

COOPERATION.--Chemical data were analyzed by the City of Portland Water Quality Laboratory and reviewed by the U.S. Geological Survey.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)
OCT								
07...	1045	.52	12.0	24	7.4	10	--	5
14...	1025	.88	11.0	26	7.2	600	200	48
23...	1030	23	9.0	20	7.1	34	11	4
28...	1025	21	8.5	20	7.3	13	8	3
NOV								
04...	1015	20	8.0	21	7.1	15	7	2
11...	0915	8.5	5.5	22	7.1	17	1	<1
18...	1010	13	6.0	21	7.1	12	4	2
25...	1020	46	5.0	20	7.1	8	7	2
DEC								
02...	1100	110	6.0	18	7.0	21	19	6
09...	1040	25	6.5	20	7.1	4	1	1
16...	1050	23	4.0	20	7.1	<1	<1	<1
30...	0950	15	4.0	21	7.2	4	<1	1
JAN								
06...	1030	36	4.5	19	7.1	9	1	1
FEB								
17...	1045	12	4.0	20	7.2	4	<1	<1
24...	1130	23	6.0	20	7.0	1	<1	<1
MAR								
02...	1100	25	6.5	20	7.1	<1	1	<1
09...	1110	18	6.0	20	7.1	4	<1	<1
16...	1130	112	4.4	20	7.3	21	<1	3
23...	1130	33	5.0	20	7.1	8	1	<1
30...	1200	24	4.5	20	7.0	1	<1	<1
APR								
05...	1130	18	--	--	--	--	--	--
06...	1130	--	3.5	19	7.1	6	<1	<1
12...	1130	30	7.0	20	7.1	3	<1	<1
19...	1025	14	--	--	--	--	--	--
20...	1025	--	7.0	21	7.2	12	1	<1
26...	1100	12	--	--	--	--	--	--
27...	1100	--	8.0	22	7.2	13	<1	1
MAY								
04...	1110	6.3	9.0	23	7.2	2	<1	2
11...	0903	3.0	7.8	26	7.2	3	<1	3
18...	0907	--	8.1	26	7.2	6	<1	1
25...	1115	5.5	--	22	7.2	14	1	4
JUN								
01...	1035	19	8.0	24	7.2	41	37	46
08...	1050	12	9.0	--	7.2	--	--	3
15...	1040	19	8.5	26	7.2	4	1	5
22...	1130	13	9.5	24	7.3	12	<1	3
29...	1030	--	9.5	23	7.3	11	1	2
JUL								
06...	1130	5.1	10.0	22	7.3	18	1	5
13...	1040	2.7	11.0	23	7.3	20	6	5
20...	1150	2.0	13.0	24	7.3	22	13	7

14139600 CAMP CREEK NEAR BULL RUN, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TURBIDITY (NTU)	COLOR (PLATINUM COBALT UNITS)	SILICA, DISSOLVED (MG/L AS SIO2)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, NITRATE TOTAL (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE TOTAL (MG/L AS P)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER DAY)
OCT								
07...	.20	<5	--	--	--	--	26	.04
14...	.40	<5	10	<.020	.10	<.003	27	.06
23...	.37	10	--	--	--	--	20	1.21
28...	.18	10	--	--	--	--	21	1.16
NOV								
04...	.19	5	--	--	--	--	21	1.14
11...	.16	<5	--	--	--	--	21	.49
18...	.29	15	--	--	--	--	24	.83
25...	.32	5	5.2	<.020	.04	<.003	21	2.58
DEC								
02...	1.0	15	--	--	--	--	30	8.88
09...	.18	<5	--	--	--	--	19	1.28
16...	.16	<5	8.1	<.020	.04	<.003	21	1.31
30...	.17	<5	--	--	--	--	18	.73
JAN								
06...	.16	<5	7.9	<.020	.02	<.003	18	1.76
FEB								
17...	.13	<5	--	--	--	--	16	.52
24...	.12	<5	--	--	--	--	17	1.04
MAR								
02...	.14	<5	--	--	--	--	16	1.10
09...	.13	<5	--	--	--	--	18	.89
16...	.09	<5	--	--	--	--	18	5.29
23...	.18	<5	--	--	--	--	17	1.51
30...	.15	<5	--	--	--	--	13	.85
APR								
05...	--	--	--	--	--	--	--	--
06...	.33	<5	--	--	--	--	22	--
12...	.18	<5	--	--	--	--	20	1.66
19...	--	--	--	--	--	--	--	--
20...	.18	<5	8.1	<.020	.02	<.003	20	--
26...	--	--	--	--	--	--	--	--
27...	.15	<5	--	--	--	--	22	--
MAY								
04...	.17	<5	--	--	--	--	20	.34
11...	.11	5	4.2	<.020	.03	<.003	22	.18
18...	.13	<5	--	--	--	--	22	--
25...	.38	5	--	--	--	--	19	.27
JUN								
01...	.42	<5	8.0	<.020	.02	<.003	21	1.12
08...	.21	--	--	--	--	--	23	.72
15...	.25	<5	--	--	--	--	21	1.11
22...	.13	<5	9.2	<.020	.01	.003	19	.64
29...	.19	<5	--	--	--	--	--	--
JUL								
06...	.17	<5	--	--	--	--	21	.29
13...	.18	<5	10	<.020	.03	<.003	22	.16
20...	.16	<5	--	--	--	--	22	.12

14139600 CAMP CREEK NEAR BULL RUN, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)
JUL								
27...	1145	1.4	14.0	25	7.3	30	7	0
AUG								
03...	1040	1.4	12.5	24	7.4	12	1	17
09...	0753	1.4	12.3	25	7.2	6	3	34
17...	1030	.77	12.5	25	7.3	2	1	17
24...	1110	.68	12.0	25	7.4	<1	1	11
31...	1115	1.6	11.0	26	7.3	8	8	38
SEP								
07...	1115	11	12.0	26	7.3	6	3	26
14...	1110	.77	12.0	24	7.3	<1	1	11
21...	1135	5.1	11.0	25	7.2	6	2	11
27...	1310	2.9	11.0	25	7.2	<1	1	4

DATE	TUR-BID-ITY (NTU)	COLOR (PLAT-INUM COBALT UNITS)	SILICA, DIS-SOLVED (MG/L AS SIO2)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS P)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)
JUL								
27...	.16	<5	--	--	--	--	26	.10
AUG								
03...	.15	<5	11	<.020	.07	<.003	24	.09
09...	.10	<5	--	--	--	--	26	.10
17...	.13	<5	--	--	--	--	19	.04
24...	.11	<5	11	<.020	.07	<.003	25	.05
31...	.24	<5	--	--	--	--	27	.12
SEP								
07...	.18	<5	--	--	--	--	28	.82
14...	.12	<5	11	<.020	.05	.003	24	.05
21...	.17	10	--	--	--	--	27	.38
27...	.19	5	--	--	--	--	22	.17

14139700 CEDAR CREEK NEAR BRIGHTWOOD, OR

LOCATION.--Lat 45°27'30", long 122°01'50", in NE¼ sec.26, T.1 S., R.6 E., Clackamas County, Hydrologic Unit 17080001, in Mount Hood National Forest, on right bank 5.8 mi (9.3 km) north of Brightwood and at mile 2.5 (4.0 km).

DRAINAGE AREA.--7.93 mi² (20.54 km²).

PERIOD OF RECORD.--July to November 1964, June 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,960 ft (597 m), from topographic map.

REMARKS.--Records excellent. No regulation or diversion above station.

AVERAGE DISCHARGE.--15 years, 68.2 ft³/s (1.931 m³/s), 116.79 in/yr (2,966 mm/yr), 49,410 acre-ft/yr (60.9 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,990 ft³/s (56.4 m³/s) Dec. 22, 1964, gage height, 7.20 ft (2.195 m), from rating curve extended above 320 ft³/s (9.06 m³/s) on basis of slope-area measurement of peak flow; minimum, 6.9 ft³/s (0.20 m³/s) Oct. 9-13, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft³/s (14.2 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 2	0830	*711	20.1	3.82	1.164	Jan. 12	1930	656	18.6	3.73	1.137
Dec. 4	1130	656	18.6	3.73	1.137	Jan. 30	2300	ice jam		*3.86	1.177

Minimum, 6.9 ft³/s (0.20 m³/s) Oct. 9-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	44	50	74	100	95	60	41	63	23	12	14
2	8.2	37	438	76	312	77	57	39	86	22	13	29
3	7.5	33	228	84	282	71	54	36	84	22	13	16
4	7.5	42	407	77	155	86	56	35	61	26	12	13
5	7.5	49	211	144	108	72	95	34	49	23	12	12
6	7.2	37	112	82	241	66	95	32	42	21	12	11
7	7.2	31	77	61	215	63	74	30	40	20	12	13
8	7.5	28	60	53	121	64	95	28	36	20	12	12
9	7.2	25	84	60	86	57	237	29	33	19	12	11
10	6.9	22	98	45	67	61	195	32	30	19	11	10
11	6.9	20	64	42	56	102	126	30	28	18	11	10
12	6.9	19	77	355	49	71	118	30	30	18	11	10
13	6.9	17	64	470	44	91	133	28	84	17	11	11
14	15	16	67	523	39	86	152	29	67	17	11	11
15	36	16	139	241	37	66	164	27	60	17	11	10
16	16	24	100	188	35	57	123	25	52	16	11	10
17	18	50	95	188	39	77	108	24	53	16	11	9.7
18	74	56	93	108	58	100	93	22	44	16	17	11
19	173	41	87	76	93	100	102	22	38	15	13	26
20	155	36	82	60	116	104	116	21	36	15	11	91
21	96	30	139	49	82	87	116	23	33	14	11	56
22	74	60	106	44	69	81	84	35	30	14	11	35
23	79	86	79	40	77	89	72	30	30	14	10	27
24	61	112	74	39	81	76	77	29	31	14	10	23
25	54	98	60	38	110	66	66	56	44	14	10	20
26	47	66	50	37	228	72	60	195	33	14	10	18
27	64	48	42	33	164	71	60	149	30	13	11	17
28	69	39	37	32	181	63	60	87	27	13	12	17
29	64	34	33	31	128	72	56	61	25	13	10	16
30	58	33	30	30	---	69	45	49	25	13	11	18
31	58	---	34	29	---	64	---	41	---	13	18	---
TOTAL	1306.6	1249	3317	3409	3373	2376	2949	1349	1324	529	363	587.7
MEAN	42.1	41.6	107	110	116	76.6	98.3	43.5	44.1	17.1	11.7	19.6
MAX	173	112	438	523	312	104	237	195	86	26	18	91
MIN	6.9	16	30	29	35	57	45	21	25	13	10	9.7
CFSM	5.31	5.25	13.5	13.9	14.6	9.66	12.4	5.49	5.56	2.16	1.48	2.47
IN.	6.13	5.86	15.56	15.99	15.82	11.14	13.83	6.33	6.21	2.48	1.70	2.76
AC-FT	2590	2480	6580	6760	6690	4710	5850	2680	2630	1050	720	1170

CAL YR 1979 TOTAL 21061.7 MEAN 57.7 MAX 656 MIN 6.9 CFSM 7.28 IN 98.79 AC-FT 41780
WTR YR 1980 TOTAL 22132.3 MEAN 60.5 MAX 523 MIN 6.9 CFSM 7.63 IN 103.81 AC-FT 43900

14139800 SOUTH FORK BULL RUN RIVER NEAR BULL RUN, OR

LOCATION.--Lat 45°26'38", long 122°06'20", in NE¼NE¼ sec.31, T.1 S., R.6 E., Clackamas County, Hydrologic Unit 17080001, in Mount Hood National Forest, on right bank 6.2 mi (10.0 km) northeast of Bull Run, and at mile 0.6 (1.0 km).

DRAINAGE AREA.--15.4 mi² (39.9 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 990 ft (302 m) from topographic map.

REMARKS.--Records good below 500 ft³/s (14.2 m³/s), fair above. No regulation or diversion above station.

AVERAGE DISCHARGE.--6 years, 111 ft³/s (3.144 m³/s), 97.88 in/yr (2,486 mm/yr), 80,420 acre-ft/yr (99.2 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,520 ft³/s (71.4 m³/s) Dec. 2, 1977, gage height, 8.32 ft (2.536 m), from rating curve extended above 810 ft³/s (22.9 m³/s); minimum, 8.0 ft³/s (0.23 m³/s) Oct. 12, 13, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 994 ft³/s (28.2 m³/s) Dec. 2, gage height, 6.11 ft (1.862 m), no peak above base of 1,600 ft³/s (45.3 m³/s); minimum, 8.0 ft³/s (0.23 m³/s) Oct. 12, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	102	93	111	113	173	104	79	116	40	17	19
2	10	86	645	116	329	146	98	72	141	38	17	39
3	9.8	73	439	154	462	127	93	65	162	37	17	24
4	9.5	85	645	143	288	139	93	62	125	42	17	20
5	9.5	96	414	265	210	130	134	61	101	39	16	18
6	9.3	80	251	178	342	117	160	57	84	35	16	17
7	9.3	69	173	134	399	113	132	52	77	33	16	20
8	9.3	61	132	111	248	113	146	48	68	32	16	18
9	9.0	53	139	105	167	100	339	48	61	31	16	16
10	8.4	48	194	90	137	102	336	52	55	30	15	16
11	8.2	43	129	82	111	176	243	52	51	29	15	15
12	8.0	40	144	548	93	137	217	51	51	28	15	16
13	8.0	36	124	730	75	173	225	48	139	27	15	17
14	18	34	124	810	66	180	243	48	143	26	14	16
15	61	32	207	478	61	144	271	46	130	26	14	15
16	31	41	178	366	55	113	220	43	111	24	14	14
17	32	76	169	376	58	130	197	41	116	23	14	14
18	100	110	173	238	88	199	169	39	98	23	22	15
19	265	86	162	171	139	217	183	37	84	22	17	29
20	272	77	152	134	194	215	220	35	74	22	15	132
21	216	66	238	108	158	185	230	38	66	21	14	114
22	164	99	235	90	130	160	178	58	58	21	14	74
23	154	172	173	79	134	167	148	54	54	20	14	56
24	126	205	156	71	139	141	150	51	55	20	13	48
25	117	216	125	69	158	124	136	93	75	19	13	41
26	96	164	105	62	332	125	119	376	58	19	13	36
27	118	124	84	51	273	129	116	336	52	19	13	32
28	128	96	72	48	294	116	113	194	48	18	16	31
29	135	80	64	45	235	121	105	141	45	18	13	29
30	129	73	57	43	---	121	88	107	43	18	13	31
31	133	---	57	42	---	114	---	88	---	17	25	---
TOTAL	2414.3	2623	6053	6048	5488	4447	5206	2572	2541	817	479	982
MEAN	77.9	87.4	195	195	189	143	174	83.0	84.7	26.4	15.5	32.7
MAX	272	216	645	810	462	217	339	376	162	42	25	132
MIN	8.0	32	57	42	55	100	88	35	43	17	13	14
CFSM	5.06	5.68	12.7	12.7	12.3	9.29	11.3	5.39	5.50	1.71	1.01	2.12
IN.	5.83	6.34	14.62	14.61	13.26	10.74	12.57	6.21	6.14	1.97	1.16	2.37
AC-FT	4790	5200	12010	12000	10890	8820	10330	5100	5040	1620	950	1950

CAL YR 1979	TOTAL	35027.3	MEAN	96.0	MAX	1070	MIN	8.0	CFSM	6.23	IN	84.61	AC-FT	69480
WTR YR 1980	TOTAL	39670.3	MEAN	108	MAX	810	MIN	8.0	CFSM	7.01	IN	95.82	AC-FT	78690

14139800 SOUTH FORK BULL RUN RIVER NEAR BULL RUN, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1978 to current year.
WATER TEMPERATURES: October 1978 to current year.
SEDIMENT DISCHARGE: October 1978 to current year.

INSTRUMENTATION.--Conductivity/temperature recorder since October 1978. Automatic pumping sampler since October 1978.

COOPERATION.--Chemical data were analyzed by the City of Portland Water Quality Laboratory and reviewed by the U.S. Geological Survey.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 43 micromhos Aug. 25, 26, 1980; minimum, 12 micromhos Dec. 4, 1979.
WATER TEMPERATURES: Maximum, 17.0°C July 18-20, 1979; minimum, 0.0°C on many days during winter periods.
SEDIMENT CONCENTRATIONS: Maximum, 38 mg/l Feb. 7, 1979; minimum, 0 mg/l on many days throughout each year.
SEDIMENT DISCHARGE: Maximum, 132 tons (120 tonnes) Feb. 7, 1979; minimum, 0 tons (0 tonnes) on many days throughout each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 43 micromhos Aug. 25, 26; minimum, 12 micromhos Dec. 4.
WATER TEMPERATURES: Maximum, 16.5°C July 22; minimum, 0.0°C on many days during winter months.
SEDIMENT CONCENTRATIONS: Maximum, 16 mg/l Jan. 12; minimum, 0 mg/l on many days throughout the year.
SEDIMENT DISCHARGE: Maximum, 28 tons (25 tonnes) Jan. 12; minimum, 0 tons (0 tonnes) on many days throughout the year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)
OCT								
07...	1156	9.0	10.5	50	7.6	4	--	1
14...	1100	12	10.0	39	7.4	57	53	78
23...	1100	188	8.2	22	7.2	24	8	17
28...	1115	158	8.0	23	7.3	12	2	--
NOV								
04...	1100	97	7.5	25	7.1	17	1	3
11...	1015	51	5.0	27	7.2	9	0	<1
18...	1055	121	5.0	24	7.1	13	3	1
25...	1110	78	4.0	21	7.1	3	1	0
DEC								
02...	1140	811	4.5	17	6.9	35	17	23
09...	1125	137	6.0	23	7.1	1	0	0
16...	1140	210	4.0	20	7.0	2	1	<1
23...	1005	205	4.5	21	7.1	8	7	--
30...	1045	85	3.5	25	7.2	0	1	<1
JAN								
06...	1125	210	3.5	21	7.1	11	1	1
20...	1000	166	2.0	23	7.1	<1	4	<1
27...	1020	74	.0	26	7.1	16	<1	<1
FEB								
03...	1040	458	3.0	19	7.1	36	7	10
10...	0900	49	3.0	23	7.1	4	--	2
17...	1120	57	3.5	27	7.2	4	1	1
24...	1215	143	5.0	23	7.0	3	0	<1
MAR								
02...	1215	139	5.5	22	7.1	1	1	<1
09...	1215	101	5.0	24	7.1	5	0	<1
16...	1210	107	3.6	24	7.2	10	0	<1
23...	1200	167	4.0	23	7.1	5	<1	<1
30...	1235	116	4.0	24	6.9	2	<1	<1
APR								
06...	1210	171	--	22	--	2	1	1
12...	1050	220	5.0	22	7.2	1	<1	<1
19...	1200	220	--	--	--	--	--	--
20...	1200	207	6.0	21	7.2	3	<1	<1
26...	1140	110	--	--	--	--	--	--
27...	1140	110	7.5	25	7.2	5	<1	0
MAY								
04...	1200	61	9.0	28	7.4	6	<1	3
11...	0925	49	7.0	31	7.3	9	4	<1
18...	0926	39	8.0	33	7.4	16	0	0
25...	1135	85	--	27	7.3	28	20	11
JUN								
01...	1110	143	8.0	27	7.3	66	11	6
08...	1145	68	9.0	30	7.4	6	4	3
15...	1115	132	8.0	29	7.3	9	1	1
22...	1150	58	10.0	30	7.4	10	3	2

14139800 SOUTH FORK BULL RUN RIVER NEAR BULL RUN, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TURBIDITY (NTU)	COLOR (PLATINUM-COBALT UNITS)	SILICA, DISSOLVED (MG/L AS SIO2)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, NITRATE TOTAL (MG/L AS N)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT							
07...	.17	<5	--	--	--	--	37
14...	.30	<5	14	<.020	.04	<.003	36
23...	.56	15	--	--	--	--	23
28...	.30	25	--	--	--	--	26
NOV							
04...	.21	10	--	--	--	--	25
11...	.19	<5	--	--	--	--	26
18...	.34	20	--	--	--	--	28
25...	.30	5	7.9	<.020	.05	<.003	22
DEC							
02...	2.0	20	--	--	--	--	31
09...	.30	5	--	--	--	--	25
16...	.26	5	8.1	<.020	.05	.003	22
23...	.36	<5	--	--	--	--	20
30...	.25	<5	--	--	--	--	22
JAN							
06...	.27	<5	--	<.020	.03	<.003	20
20...	.24	<5	--	--	--	--	21
27...	.16	<5	11	<.020	.06	.004	25
FEB							
03...	.77	5	--	--	--	--	21
10...	.20	<5	--	--	--	--	22
17...	.16	<5	--	--	--	--	21
24...	.19	<5	--	--	--	--	21
MAR							
02...	.19	<5	--	--	--	--	18
09...	.20	<5	--	--	--	--	21
16...	.22	<5	--	--	--	--	21
23...	.21	<5	--	--	--	--	20
30...	.21	5	--	--	--	--	17
APR							
06...	--	<5	--	--	--	--	20
12...	.20	<5	--	--	--	--	22
19...	--	--	--	--	--	--	--
20...	.29	5	8.1	<.020	.02	<.003	21
26...	--	--	--	--	--	--	--
27...	.20	<5	--	--	--	--	24
MAY							
04...	.19	<5	--	--	--	--	24
11...	.13	5	5.1	<.020	.03	.003	27
18...	.19	<5	--	--	--	--	28
25...	.55	5	--	--	--	--	24
JUN							
01...	.33	5	5.3	<.020	.01	<.003	24
08...	.21	<5	--	--	--	--	28
15...	.19	<5	--	--	--	--	23
22...	.16	<5	11	<.020	.01	<.003	24

14139800 SOUTH FORK BULL RUN RIVER NEAR BULL RUN, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, (COLS. PER 100 ML)
JUN								
29...	1120	45	10.5	30	7.4	13	0	3
JUL								
06...	1150	34	11.5	32	7.5	20	<1	6
11...	1100	28	11.2	33	--	--	--	--
13...	1110	26	12.0	34	7.6	10	1	6
20...	1230	21	14.0	36	7.6	15	3	6
27...	1215	18	15.5	38	7.7	36	3	14
AUG								
03...	1115	17	13.0	38	7.7	16	4	15
08...	1500	15	13.8	40	7.5	--	--	--
09...	0809	28	11.0	40	7.6	4	7	51
17...	1115	14	12.0	39	7.7	12	<1	16
20...	1430	15	12.9	40	7.6	--	--	--
24...	1140	13	12.0	40	7.7	2	0	13
SEP								
02...	1315	55	11.0	36	7.3	--	--	--
07...	1210	20	12.0	40	7.4	2	1	28
14...	1150	15	11.0	39	7.5	2	2	15
21...	1150	101	9.5	28	7.3	26	23	28
27...	1345	32	10.0	33	7.4	4	1	7

DATE	TUR-BID-ITY (NTU)	COLOR (PLAT-INUM-COBALT UNITS)	SILICA, DIS-SOLVED (MG/L AS SIO2)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
JUN							
29...	.16	<5	--	--	--	--	--
JUL							
06...	.15	<5	--	--	--	--	31
11...	--	--	--	--	--	--	--
13...	.13	<5	14	<.020	.01	<.003	30
20...	.14	<5	--	--	--	--	32
27...	.14	<5	--	--	--	--	37
AUG							
03...	.13	<5	15	<.020	.03	<.003	32
08...	--	--	--	--	--	--	--
09...	.26	<5	--	--	--	--	39
17...	.15	<5	--	--	--	--	32
20...	.50	--	15	<.002	.00	.000	--
24...	.17	<5	15	<.020	.03	.004	36
SEP							
02...	--	--	--	--	--	--	--
07...	.25	<5	--	--	--	--	40
14...	.15	<5	15	<.020	.02	<.003	35
21...	.29	15	--	--	--	--	30
27...	.13	<5	--	--	--	--	28

14139800 SOUTH FORK BULL RUN RIVER NEAR BULL RUN, OR--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	26	25	23	25	22	24	---	25	31	38	40
2	39	27	15	22	21	---	24	---	24	31	39	37
3	39	26	14	21	19	---	24	---	22	32	39	37
4	40	26	14	22	21	---	25	---	23	31	39	38
5	40	26	17	19	22	---	23	---	24	31	39	38
6	40	26	20	21	21	---	23	---	25	32	39	39
7	40	27	21	21	19	20	24	---	25	33	40	39
8	40	27	22	21	20	21	24	---	26	33	40	38
9	40	28	22	22	21	21	21	---	26	33	40	38
10	40	28	20	23	22	21	21	---	27	33	40	39
11	40	28	24	24	22	19	22	---	27	34	41	39
12	39	29	20	19	---	20	22	---	28	34	41	39
13	39	29	21	17	---	20	22	---	25	35	41	38
14	39	30	21	17	---	20	21	29	24	35	41	38
15	35	29	19	18	---	21	21	29	24	36	41	38
16	36	30	19	19	---	22	21	30	25	36	41	38
17	35	27	19	19	---	21	22	31	25	36	41	39
18	32	25	20	20	---	20	22	31	25	37	41	38
19	25	25	21	22	---	20	22	32	26	37	41	37
20	24	25	21	23	---	20	21	32	27	38	41	28
21	24	26	21	24	21	20	21	32	27	39	41	26
22	25	25	21	24	22	21	22	29	28	39	42	26
23	25	22	21	25	22	20	23	29	28	39	42	27
24	26	21	21	25	22	21	---	29	28	39	42	28
25	27	21	22	26	22	21	---	27	28	39	42	28
26	27	22	22	26	19	22	---	21	29	39	42	30
27	27	23	23	26	20	22	---	20	29	39	42	31
28	25	23	23	27	20	22	---	22	30	39	41	32
29	25	24	25	27	21	23	---	23	30	39	41	33
30	25	25	25	27	---	23	---	24	30	39	42	34
31	25	---	25	27	---	23	---	25	---	39	40	---
MEAN	33	26	21	22	21	21	22	28	26	36	41	35

14139800 SOUTH FORK BULL RUN RIVER NEAR BULL RUN, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	11.0	11.0	7.0	6.5	4.0	3.5	5.5	5.0	1.0	.0	5.5	4.5
2	11.0	10.5	8.0	7.0	5.0	3.5	5.0	5.0	3.0	.5	---	---
3	10.5	10.5	8.0	7.5	5.5	4.5	5.0	4.5	3.5	2.5	---	---
4	10.5	10.0	7.5	7.5	5.5	5.0	5.5	5.0	4.0	3.0	---	---
5	10.5	10.0	8.0	7.5	5.5	5.0	5.5	4.5	4.0	3.5	---	---
6	11.0	10.5	7.5	7.0	6.0	5.5	4.5	3.0	4.0	3.5	---	---
7	11.0	10.5	7.0	6.5	6.0	5.0	3.0	2.0	4.0	3.5	4.5	4.5
8	11.0	10.5	7.0	6.0	5.5	5.0	2.5	.0	4.0	3.5	5.0	4.5
9	11.0	10.5	6.5	6.0	6.0	5.0	1.0	.0	4.0	3.0	5.0	4.5
10	10.5	10.0	6.5	6.0	5.0	4.0	1.5	.5	4.0	3.0	5.0	4.5
11	10.5	9.5	6.5	5.5	4.5	3.5	2.0	1.0	3.5	3.0	4.5	3.0
12	10.5	9.5	5.5	5.0	5.0	4.5	3.0	1.0	---	---	4.0	3.0
13	10.5	9.5	5.5	5.0	6.0	5.0	4.0	3.0	---	---	4.0	2.5
14	10.5	10.0	5.0	4.0	6.0	6.0	4.0	3.5	---	---	3.5	2.5
15	11.0	10.5	5.0	4.0	6.0	5.5	4.5	4.0	---	---	3.0	2.5
16	11.0	10.5	6.0	5.0	5.5	4.5	4.5	4.0	---	---	4.0	3.0
17	10.5	9.5	6.5	6.0	6.0	5.5	4.0	3.5	---	---	4.5	3.5
18	9.5	9.0	6.0	4.5	6.5	6.0	3.5	2.5	---	---	4.0	3.5
19	9.0	8.5	5.5	5.0	6.5	6.0	3.0	2.5	---	---	4.5	4.0
20	8.5	8.0	5.0	4.5	6.0	5.5	3.5	2.5	---	---	5.0	4.0
21	9.0	8.0	5.0	4.0	6.0	4.5	3.5	3.0	4.0	3.0	5.0	4.5
22	9.0	8.5	5.5	5.0	5.0	4.5	3.5	3.0	4.0	3.0	5.0	4.0
23	9.0	8.5	5.5	5.0	4.5	4.0	3.5	3.0	4.5	3.5	4.5	3.5
24	9.0	8.5	5.5	4.5	5.0	4.5	3.5	3.0	5.0	4.0	4.5	3.5
25	9.0	8.5	5.0	4.5	5.5	4.5	4.0	2.5	4.5	4.5	5.0	3.5
26	8.5	8.5	5.0	4.5	5.0	4.5	3.0	.5	4.5	4.0	5.0	3.5
27	9.0	8.5	4.5	3.5	4.5	4.0	.5	.0	5.0	4.5	4.5	3.5
28	8.5	8.0	3.5	2.5	4.5	4.0	.5	.0	5.0	4.5	5.0	3.5
29	8.0	7.5	3.0	2.5	5.0	4.5	.0	.0	5.0	4.5	4.5	3.5
30	7.5	7.0	4.0	3.0	5.0	4.5	.0	.0	---	---	5.0	3.0
31	7.5	7.0	---	---	5.0	4.5	.5	.0	---	---	5.0	4.0
MONTH	11.0	7.0	8.0	2.5	6.5	3.5	5.5	.0	5.0	.0	5.5	2.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	5.0	4.0	---	---	8.0	7.0	12.5	10.0	15.0	13.0	11.5	10.0
2	5.0	3.5	---	---	7.5	6.5	11.5	10.5	13.5	13.0	11.0	10.5
3	5.0	3.5	---	---	8.5	6.5	10.5	9.5	13.5	12.5	11.0	10.0
4	5.5	4.0	---	---	9.5	6.5	9.5	9.5	14.0	12.0	11.5	10.0
5	5.0	4.0	---	---	7.5	7.0	10.5	9.0	13.0	12.0	11.5	10.5
6	4.0	2.0	---	---	8.5	7.0	12.0	9.5	13.5	12.0	12.0	11.0
7	4.0	2.5	---	---	9.0	7.5	13.0	10.5	14.0	12.0	12.0	11.0
8	4.5	3.5	---	---	9.0	8.5	13.0	12.0	14.0	12.5	11.5	10.5
9	4.0	3.5	---	---	9.0	8.5	12.5	11.0	14.5	12.5	12.0	11.0
10	5.0	3.5	---	---	9.5	8.0	12.0	10.5	14.5	13.0	12.5	11.5
11	6.0	4.0	---	---	9.5	9.0	11.5	10.5	15.0	13.5	12.5	11.5
12	6.5	4.5	---	---	9.0	8.0	12.5	10.5	14.5	13.5	12.0	11.5
13	6.5	4.5	---	---	8.0	7.5	13.0	11.0	13.5	13.0	11.5	10.5
14	5.5	5.0	7.5	7.0	8.0	7.5	12.0	11.5	13.0	12.5	11.0	10.5
15	6.0	4.5	7.5	7.0	9.0	7.5	13.5	11.0	12.5	12.0	11.0	10.0
16	7.0	4.5	8.0	7.0	8.0	8.0	13.0	12.0	12.5	11.5	11.0	10.0
17	6.5	5.0	9.5	7.0	9.5	7.5	13.5	11.5	13.0	12.0	11.0	10.0
18	7.0	5.0	10.0	8.5	10.5	8.0	13.5	12.0	12.0	11.5	11.0	10.5
19	6.5	6.0	10.5	9.0	11.0	8.0	13.5	12.0	12.5	11.0	10.5	10.5
20	6.0	5.5	11.0	9.0	10.0	9.0	14.5	12.0	12.5	11.5	10.5	10.0
21	5.5	5.0	10.0	9.0	10.0	9.0	16.0	13.0	12.5	11.0	10.0	9.5
22	6.0	5.0	9.0	7.5	10.5	9.0	16.5	14.5	12.5	11.5	9.5	8.5
23	7.0	5.5	8.0	7.0	10.0	9.0	15.5	14.0	12.5	11.0	10.0	9.0
24	---	---	7.5	7.0	9.5	9.0	15.0	13.5	12.5	11.5	10.0	9.5
25	---	---	7.0	6.5	9.5	9.0	15.0	13.0	12.5	11.0	10.5	9.5
26	---	---	6.5	6.5	9.0	8.5	15.5	13.5	12.5	11.0	11.0	10.0
27	---	---	7.0	6.5	10.5	8.5	16.0	13.5	12.0	11.5	10.5	10.0
28	---	---	8.0	6.5	11.5	9.0	16.0	14.0	11.5	10.5	10.5	10.0
29	---	---	8.0	7.0	11.5	9.5	15.5	13.5	11.5	10.0	10.5	10.0
30	---	---	8.0	7.0	12.0	9.0	15.0	13.0	11.0	10.0	11.0	10.5
31	---	---	8.5	7.5	---	---	15.0	13.0	11.0	10.5	---	---
MONTH	7.0	2.0	11.0	6.5	12.0	6.5	16.5	9.0	15.0	10.0	12.5	8.5

14139800 SOUTH FDRK BULL RUN RIVER NEAR BULL RUN, DR--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN CONCEN-TRATION (MG/L)	LDADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LDADS (T/DAY)	MEAN CDNCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LDADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LDADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LDADS (T/DAY)
	OCTOBER		NDVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	1	.03	2	.55	1	.25	1	.30	---	.61	2	.93
2	1	.03	1	.23	---	20	2	.63	---	8.0	1	.39
3	1	.03	1	.20	---	7.1	2	.83	---	7.5	1	.34
4	1	.03	2	.46	---	17	1	.39	---	2.3	1	.38
5	0	.00	1	.26	---	2.2	1	.72	---	1.1	1	.35
6	0	.00	1	.22	---	.68	1	.48	---	9.2	1	.32
7	0	.00	2	.37	---	.47	1	.36	---	5.4	1	.31
8	0	.00	2	.33	---	.36	1	.30	---	1.3	2	.61
9	0	.00	2	.29	---	.38	1	.28	---	.90	2	.54
10	0	.00	2	.26	1	.52	1	.24	---	.74	2	.55
11	0	.00	2	.23	1	.35	2	.44	1	.30	1	.48
12	0	.00	1	.11	1	.39	16	28	1	.25	1	.37
13	0	.00	1	.10	1	.33	7	13	1	.20	0	.00
14	2	.10	1	.09	1	.33	8	18	1	.18	1	.49
15	2	.33	1	.09	1	.56	3	4.2	1	.16	2	.78
16	2	.17	1	.11	1	.48	2	2.0	0	.00	2	.61
17	2	.17	1	.21	1	.46	1	1.0	0	.00	2	.70
18	4	1.1	1	.30	1	.47	1	.64	1	.24	3	1.6
19	6	4.3	1	.23	1	.44	1	.46	2	.75	5	2.9
20	6	4.4	1	.21	1	.41	1	.36	3	1.6	2	1.2
21	2	1.2	1	.18	2	1.7	1	.29	2	.85	2	1.0
22	1	.44	1	.27	2	1.3	1	.24	2	.70	2	.86
23	0	.00	1	.46	0	.00	1	.21	3	1.1	3	1.4
24	2	.68	1	.55	0	.00	1	.19	2	.75	2	.76
25	2	.63	1	.58	1	.34	1	.19	3	1.3	1	.33
26	2	.52	1	.44	1	.28	1	.17	5	4.5	2	.68
27	2	.64	1	.33	1	.23	---	.14	2	1.5	1	.35
28	2	.69	1	.26	1	.19	---	.13	2	1.6	1	.31
29	2	.73	1	.22	1	.17	---	.12	2	1.3	3	.98
30	0	.00	1	.20	1	.15	---	.12	---	---	2	.65
31	0	.00	---	---	1	.15	---	.11	---	---	1	.31
TOTAL	---	16.22	---	8.34	---	57.69	---	74.54	---	54.33	---	21.48

DAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CDNCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CDNCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CDNCEN-TRATION (MG/L)	LDADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LDADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
2	1	.26	0	.00	0	.00	0	.00	0	.00	0	.00
3	1	.25	0	.00	0	.00	0	.00	0	.00	0	.00
4	1	.25	0	.00	0	.00	0	.00	0	.00	0	.00
5	1	.36	0	.00	0	.00	0	.00	0	.00	0	.00
6	1	.43	0	.00	0	.00	0	.00	0	.00	0	.00
7	1	.36	0	.00	0	.00	0	.00	0	.00	0	.00
8	2	.79	0	.00	0	.00	0	.00	0	.00	0	.00
9	3	2.7	0	.00	0	.00	0	.00	0	.00	0	.00
10	2	1.8	0	.00	0	.00	0	.00	0	.00	0	.00
11	1	.66	0	.00	0	.00	0	.00	0	.00	0	.00
12	1	.59	0	.00	0	.00	0	.00	0	.00	0	.00
13	2	1.2	0	.00	0	.00	0	.00	0	.00	0	.00
14	1	.66	0	.00	0	.00	0	.00	0	.00	0	.00
15	1	.73	0	.00	0	.00	0	.00	0	.00	0	.00
16	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
17	1	.53	0	.00	0	.00	0	.00	0	.00	0	.00
18	1	.46	0	.00	0	.00	0	.00	0	.00	0	.00
19	1	.49	0	.00	0	.00	0	.00	0	.00	0	.00
20	1	.59	0	.00	0	.00	0	.00	0	.00	0	.00
21	1	.62	0	.00	0	.00	0	.00	0	.00	0	.00
22	1	.48	0	.00	0	.00	0	.00	0	.00	0	.00
23	---	.40	0	.00	0	.00	0	.00	0	.00	0	.00
24	---	.41	0	.00	0	.00	0	.00	0	.00	0	.00
25	---	.37	1	.25	0	.00	0	.00	0	.00	0	.00
26	---	.00	9	9.1	0	.00	0	.00	0	.00	0	.00
27	---	.00	3	2.7	0	.00	0	.00	0	.00	0	.00
28	---	.00	1	.52	0	.00	0	.00	0	.00	0	.00
29	---	.00	0	.00	0	.00	0	.00	0	.00	0	.00
30	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
31	---	---	0	.00	---	---	0	.00	0	.00	---	---
TOTAL	---	15.39	---	12.57	---	0.00	---	0.00	---	0.00	---	0.00

14139900 BULL RUN RESERVOIR NUMBER TWO NEAR BULL RUN, OR

LOCATION.--Lat 45°26'55", long 122°08'45", on line between secs.25 and 26, T.1 S., R.5 E., Clackamas County, Hydrologic Unit 17080001, in Mount Hood National Forest, on south tower 0.3 mi (0.5 km) above headworks dam on Bull Run River, 4.4 mi (7.1 km) northeast of Bull Run, and at mile 6.5 (10.5 km).

DRAINAGE AREA.--102 mi^2 (264 km^2).

PERIOD OF RECORD.--December 1961 to current year. Prior to October 1975, monthend contents only.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Portland Water Bureau). Prior to Dec. 31, 1975, nonrecording gage at same site and datum.

REMARKS.--Reservoir is formed by earth and rockfill dam with concrete spillway built by Portland Water Bureau. Storage began about Dec. 20, 1961; first filling occurred Dec. 24, 1961. Capacity, 20,990 acre-ft (25.8 hm^3) at crest of spillway, elevation, 860.0 ft (262.13 m). Dead storage negligible. Water is used for power generation by Portland General Electric Co. and municipal supply for city of Portland.

COOPERATION.--Capacity table furnished by Portland Water Bureau.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 23,660 acre-ft (29.2 hm^3) Dec. 22, 1964, elevation, 866.00 ft (263.957 m); no contents at times during low-flow periods.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 22,100 acre-ft (27.2 hm^3) Jan. 13, elevation, 862.50 ft (262.890 m); minimum observed, 10,580 acre-ft (13.0 hm^3) Oct. 4, elevation, 831.80 ft (253.533 m).

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	833.90	860.00	860.27	859.83	860.30	860.61	860.23	860.20	860.00	859.28	859.33	857.09
2	833.20	860.40	861.70	860.51	861.85	860.51	860.20	860.16	860.16	859.19	859.34	857.53
3	832.10	860.35	861.13	860.53	861.30	860.38	860.20	860.12	860.14	859.28	859.50	857.95
4	833.20	860.05	861.95	860.44	860.87	860.43	860.23	860.12	860.06	859.28	859.43	858.24
5	835.10	859.95	861.09	860.53	860.65	860.38	860.42	859.21	859.94	859.32	859.38	858.47
6	839.09	860.43	860.89	860.37	861.37	860.31	860.45	858.31	859.89	859.28	859.36	858.66
7	842.54	860.20	860.80	860.46	860.96	860.27	860.34	857.87	859.89	859.25	859.33	859.00
8	845.80	860.13	860.76	860.32	860.67	860.28	860.51	857.92	859.90	859.35	859.33	859.21
9	848.13	860.09	860.82	860.36	860.53	860.22	861.10	858.28	859.80	859.48	859.37	859.28
10	849.69	860.05	860.06	860.08	860.40	860.35	860.85	858.94	859.76	859.47	859.34	859.27
11	850.79	860.04	860.18	861.00	860.32	860.46	860.68	859.41	859.68	859.31	859.14	859.35
12	851.46	860.00	860.33	862.20	860.27	860.39	860.67	859.43	859.72	859.29	859.12	859.66
13	852.01	860.00	860.32	862.50	860.21	860.53	860.76	859.48	860.26	859.18	859.22	860.00
14	852.74	859.95	860.34	862.00	860.13	860.49	859.97	859.47	860.27	859.15	859.36	860.37
15	853.46	859.80	860.85	861.40	860.16	860.36	860.87	859.42	860.03	859.11	859.44	860.33
16	853.46	859.97	860.64	861.20	860.12	860.30	860.89	859.40	860.01	859.00	859.59	860.21
17	853.13	860.29	860.71	860.91	860.15	860.48	860.64	859.41	859.85	859.09	859.59	860.10
18	853.10	860.34	860.64	860.62	860.31	860.58	860.58	859.34	859.92	859.11	859.44	860.04
19	853.60	860.16	860.61	860.46	860.58	860.61	860.68	859.58	859.86	859.21	859.46	860.16
20	855.40	860.07	860.61	860.33	860.64	860.58	860.73	860.00	859.78	859.41	859.70	860.47
21	856.35	859.97	860.90	860.26	860.48	860.46	860.64	860.00	859.78	859.13	859.69	860.44
22	856.64	860.26	860.73	860.17	860.41	860.41	860.51	860.20	859.76	858.88	859.29	860.39
23	856.68	860.38	860.57	860.13	860.40	860.41	860.45	860.15	859.68	859.19	858.36	860.37
24	856.70	860.69	860.49	860.11	860.40	860.34	860.45	860.15	859.76	859.55	857.42	860.33
25	856.63	860.57	860.47	860.05	860.58	860.29	860.38	860.30	859.86	859.62	856.51	860.11
26	856.55	860.41	860.38	859.89	861.09	860.35	860.37	860.10	859.78	859.58	856.01	859.81
27	856.50	860.25	859.67	859.90	860.90	860.33	860.41	860.58	859.70	859.47	855.68	859.72
28	856.70	859.97	858.61	859.74	861.17	860.33	860.40	859.92	859.66	859.23	855.65	859.78
29	856.80	860.00	858.28	860.07	860.96	860.36	860.30	860.10	859.65	859.26	855.79	859.69
30	856.80	860.00	858.61	860.09	---	860.32	860.22	859.94	859.53	859.49	856.08	859.64
31	858.20	---	858.70	860.09	---	860.28	---	859.91	---	859.44	856.61	---
MEAN	849.89	860.16	860.39	860.53	860.63	860.40	860.50	859.59	859.87	859.29	858.54	859.52
MAX	858.20	860.69	861.95	862.50	861.85	860.61	861.10	860.58	860.27	859.62	859.70	860.47
MIN	832.10	859.80	858.28	859.74	860.12	860.22	859.97	857.87	859.53	858.88	855.65	857.09
(†)	20210	21000	20430	21040	21420	21120	21100	20960	20790	20750	19510	20840
(‡)	+8610	+790	-570	+610	+380	-300	-20	-140	-170	-40	-1240	+1330

CAL YR 1979 MEAN 856.26 MAX 862.50 MIN 829.70 AC-FT‡ -500
WTR YR 1980 MEAN 859.09 MAX 862.50 MIN 832.10 AC-FT‡ +9240

† Contents in acre-feet, at 2400, on last day of month.
‡ Change in contents, in acre-feet.

14140001 BULL RUN RIVER NEAR BULL RUN, OR

LOCATION.--Lat 45°26'15", long 122°10'40", in NE¼SW¼ sec.34, T.1 S., R.5 E., Clackamas County, Hydrologic Unit 17080001, in Mount Hood National Forest, on left bank 1.8 mi (2.9 km) downstream from Bull Run Reservoir Number Two, 2.7 mi (4.3 km) northeast of Bull Run, and at mile 4.7 (7.6 km).

DRAINAGE AREA.--107 mi^2 (277 km^2).

PERIOD OF RECORD.--September 1907 to current year. Records for January 1895 to August 1907, published in WSP 370, have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 1288: 1910-11, 1913, 1920-23, 1926, 1929. WSP 1318: 1919(M). WSP 1568: 1952. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 567.90 ft (173.096 m) National Geodetic Vertical Datum of 1929 (levels by Portland Water Bureau). Prior to July 27, 1909, nonrecording gage at site 1.5 mi (2.4 km) upstream at different datum. July 27, 1909, to Sept. 30, 1959, water-stage recorder at site 2.5 mi (4.0 km) upstream at different datums.

REMARKS.--Records excellent. Water stored since 1915 in Bull Run Lake, capacity, 12,270 acre-ft (15.1 hm^3), and since 1958 in North Fork Reservoir, capacity, 1,030 acre-ft (1.27 hm^3). Flow regulated since 1929 by Bull Run Reservoir Number One (see station 14139000), and since 1961 by Bull Run Reservoir Number Two (see station 14139900). All records given herein include flow diverted from Bull Run Reservoir Number Two for city of Portland, and that used by Portland General Electric Co. for power generation, which returns to Bull Run River below station. Total diversion, 188,300 acre-ft (232 hm^3) of which 56,640 acre-ft (69.8 hm^3) was used for power generation and returned to Bull Run River.

COOPERATION.--Records of daily diversion furnished by Portland Water Bureau.

AVERAGE DISCHARGE.--73 years, 776 ft^3/s (21.98 m^3/s), 98.49 in/yr (2,502 mm/yr), 562,200 acre-ft/yr (693 hm^3/yr), adjusted for storage in Bull Run Reservoir Number One since 1929 and Bull Run Reservoir Number Two since 1961.

EXTREMES FOR PERIOD OF RECORD.--River only, maximum discharge, 24,800 ft^3/s (702 m^3/s) Dec. 22, 1964, gage height, 17.21 ft (5.246 m), from rating curve extended above 8,800 ft^3/s (249 m^3/s) on basis of computation of peak flow over dam; minimum, 1.1 ft^3/s (0.03 m^3/s) Oct. 4, 1974.

Combined flow, maximum discharge, 25,100 ft^3/s (711 m^3/s) Dec. 22, 1964; minimum daily, 63 ft^3/s (1.78 m^3/s) Aug. 13-16, 1926.

EXTREMES FOR CURRENT YEAR.--River only, maximum discharge, 6,550 ft^3/s (185 m^3/s) Jan. 13, gage height, 10.70 ft (3.261 m); minimum, 2.0 ft^3/s (0.057 m^3/s) Oct. 1-6, 9, 10.

Combined flow, maximum discharge, 6,880 ft^3/s (195 m^3/s) Jan. 13; minimum daily, 139 ft^3/s (3.94 m^3/s) Sept. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	164	175	489	617	515	1330	741	685	664	355	296	160
2	190	572	4390	1020	1750	1000	692	683	801	371	269	223
3	208	526	3080	1220	3200	967	661	623	955	319	197	139
4	203	434	4650	1050	2000	930	643	580	809	306	250	196
5	203	206	3310	1600	1420	963	801	495	723	308	266	217
6	181	298	2130	1290	1630	837	1080	366	559	290	262	208
7	167	567	1670	1000	2520	771	926	371	522	328	269	210
8	174	400	1570	939	1610	764	924	384	505	287	278	203
9	188	348	1560	937	1160	725	1830	374	442	231	279	257
10	188	311	1240	848	910	679	2040	349	394	196	264	268
11	206	273	546	647	746	1010	1550	258	359	219	312	285
12	179	249	804	3160	676	951	1320	269	330	186	300	215
13	181	259	848	5450	610	1020	1390	251	728	221	258	214
14	151	240	817	6360	541	1160	1010	252	1160	227	230	197
15	154	246	1190	3660	483	1040	1360	258	928	223	241	247
16	164	208	1490	2310	433	847	2570	261	707	260	239	241
17	166	363	1350	2450	432	846	1420	258	653	255	241	238
18	163	678	1380	1710	518	1200	1210	266	549	280	190	239
19	168	586	1260	1250	844	1270	1220	278	583	270	247	223
20	165	485	1220	1010	1220	1270	1400	213	537	234	258	268
21	145	452	1530	862	1050	1150	1470	271	442	286	294	332
22	162	441	1660	740	852	976	1200	339	439	370	267	275
23	185	886	1290	663	793	973	1020	402	380	300	238	260
24	205	925	1110	624	769	897	1010	400	352	267	231	232
25	180	1310	1060	603	804	798	971	464	464	268	212	232
26	187	974	1020	570	1760	763	888	1610	451	279	255	281
27	171	779	738	455	1850	841	879	2080	371	271	213	231
28	170	641	424	427	1680	821	967	1010	336	303	154	194
29	174	508	424	262	1610	814	911	658	321	312	192	204
30	187	464	424	224	---	862	761	693	317	314	212	211
31	181	---	424	233	---	797	---	582	---	319	166	---
TOTAL	5510	14804	45098	44191	34386	29272	34865	15983	16781	8655	7580	6900
MEAN	178	493	1455	1426	1186	944	1162	516	559	279	245	230
MAX	208	1310	4650	6360	3200	1330	2570	2080	1160	371	312	332
MIN	145	175	424	224	432	679	643	213	317	186	154	139
AC-FT	10930	29360	89450	87650	68200	58060	69150	31700	33290	17170	15030	13690
MEAN†	435	524	1438	1433	1202	934	1162	566	555	185	110	226
CFSM†	4.07	4.90	13.4	13.4	11.2	8.73	10.9	5.29	5.19	1.73	1.03	2.11
IN.†	4.69	5.46	15.50	15.45	12.11	10.06	12.11	6.10	5.78	1.99	1.18	2.35
AC-FT†	26770	31170	88450	88140	69130	57410	69130	34810	33000	11370	6750	13420

CAL YR 1979 TOTAL 256539 MEAN 703 MAX 7650 MIN 145 AC-FT 508800 MEAN† 703 CFSM† 6.57 IN.† 89.18 AC-FT† 508880
WTR YR 1980 TOTAL 264025 MEAN 721 MAX 6360 MIN 139 AC-FT 523700 MEAN† 729 CFSM† 6.81 IN.† 92.81 AC-FT† 529580

† Adjusted for change in contents in Bull Run Reservoir number One and Bull Run Reservoir Number Two.

14141500 LITTLE SANOY RIVER NEAR BULL RUN, OR

LOCATION.--Lat 45°24'55", iong 122°10'20", in NW¼NW¼ sec.10, T.2 S., R.5 E., Clackamas County, Hydrologic Unit 17080001, in Mount Hood National Forest, on left bank 0.25 mi (0.40 km) upstream from Portland General Electric Co. dam and tunnel from Sandy River, 3.0 mi (4.8 km) east of Bull Run, and at mile 1.95 (3.14 km).

ORAINAGE AREA.--22.3 mi² (57.8 km²).

PERIOO OF RECORO.--May to July 1911, October 1911 to March 1912, June 1912 to April 1913, July 1919 to current year. Monthly discharge only for some periods, published in WSP 1318.

REVISEO RECORDS.--WSP 1154: 1949. WSP 1248: Orainage area. WSP 1288: 1912, 1920-21(M), 1922-23, 1931, 1945. WSP 1318: 1920.

GAGE.--Water-stage recorder. Aititude of gage is 720 ft (220 m), from topographic map. May 23, 1911, to Apr. 29, 1913, nonrecording gage at site 0.85 mi (1.37 km) downstream at different datum, 0.5 mi (0.8 km) downstream from Sandy River diversion tunnei. July 1, 1919, to Sept. 30, 1931, water-stage recorder at site 0.1 mi (0.2 km) downstream at different datum. Oct 1, 1931, to Nov. 3, 1967, at site 0.1 mi (0.2 km) downstream at datum 712 ft (217 m) National Geodetic Vertical Datum of 1929. Nov. 4, 1967, to Aug. 8, 1971, water-stage recorder at site 0.1 mi (0.2 km) downstream at datum 697.44 ft (212.580 m) National Geodetic Vertical Oatum of 1929 (Portland General Electric Co. bench mark).

REMARKS.--Records excellent. No reguiation or diversion above station.

AVERAGE OISCHARGE.--61 years (water years 1920-80), 147 ft³/s (4.163 m³/s), 89.52 in/yr (2,274 mm/yr), 106,500 acre-ft/yr (131 hm³/yr).

EXTREMES FOR PERIOO OF RECORO.--Maximum discharge, 5,320 ft³/s (151 m³/s) Nov. 20, 1921, gage height, 9.18 ft (2.798 m), site and datum then in use, from rating curve extended above 2,200 ft³/s (62.3 m³/s); minimum, 8 ft³/s (0.23 m³/s) Aug. 20, Sept. 16, 17, 1940.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,400 ft³/s (39.6 m³/s) and maximum (*):

Oate	Time	Oischarge (ft³/s)	Oischarge (m³/s)	Gage height (ft)	Gage height (m)	Oate	Time	Oischarge (ft³/s)	Oischarge (m³/s)	Gage height (ft)	Gage height (m)
Oec. 2	0830	1,440	40.8	4.71	1.436	Jan. 13	2130	*1,550	43.9	*4.78	1.457

Minimum, 12 ft³/s (0.34 m³/s) Oct. 3, 4, 6, 7, 9-12.

OISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

OAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	105	99	139	160	182	137	120	165	57	24	31
2	13	87	834	142	393	155	134	113	273	54	21	69
3	12	75	483	174	521	144	134	101	255	53	22	37
4	13	87	785	160	315	188	139	103	179	60	21	27
5	13	103	447	307	224	176	191	103	139	56	21	23
6	12	80	269	203	349	150	197	93	118	49	21	21
7	13	67	200	155	393	139	155	82	113	45	21	25
8	13	60	158	147	262	155	171	77	99	44	20	24
9	13	50	185	194	197	142	332	82	87	43	19	21
10	12	47	231	160	160	139	319	95	80	42	19	19
11	12	43	152	147	137	224	258	93	73	40	18	18
12	12	40	152	764	120	176	241	93	77	39	18	20
13	13	37	137	1130	109	191	269	82	218	36	18	24
14	24	34	142	1230	99	224	291	80	224	36	18	22
15	64	33	269	635	91	203	319	75	203	35	18	20
16	30	50	203	483	85	171	251	72	171	33	18	19
17	44	113	182	499	91	176	231	70	168	32	18	18
18	120	142	194	315	118	224	206	64	139	33	27	21
19	371	99	171	231	179	269	231	60	118	31	23	37
20	344	87	158	185	224	269	276	57	105	30	19	152
21	228	75	248	158	160	224	284	63	93	29	18	139
22	147	109	241	137	137	194	200	95	83	26	18	80
23	152	174	179	122	147	197	179	85	78	25	18	58
24	111	215	152	118	152	174	197	78	80	25	17	48
25	99	212	132	111	185	155	174	182	113	24	17	40
26	82	158	118	101	362	155	163	698	85	24	16	34
27	107	120	103	87	276	155	168	452	77	24	19	32
28	132	97	91	85	311	139	174	244	69	24	22	32
29	165	83	82	80	244	158	158	174	66	23	18	31
30	144	80	75	77	---	158	122	137	61	22	18	37
31	150	---	77	73	---	150	---	116	---	23	49	---
TOTAL	2678	2762	6949	8549	6201	5556	6301	4039	3809	1117	634	1179
MEAN	86.4	92.1	224	276	214	179	210	130	127	36.0	20.5	39.3
MAX	371	215	834	1230	521	269	332	698	273	60	49	152
MiN	12	33	75	73	85	139	122	57	61	22	16	18
CFSM	3.87	4.13	10.0	12.4	9.60	8.03	9.42	5.83	5.70	1.61	.92	1.76
iN.	4.47	4.61	11.59	14.26	10.34	9.27	10.51	6.74	6.35	1.86	1.06	1.97
AC-FT	5310	5480	13780	16960	12300	11020	12500	8010	7560	2220	1260	2340

CAL YR 1979	TOTAL 45229	MEAN 124	MAX 1300	MIN 12	CFSM 5.56	IN 75.45	AC-FT 89710		
WTR YR 1980	TOTAL 49774	MEAN 136	MAX 1230	MIN 12	CFSM 6.10	IN 83.03	AC-FT 98730		

14144800 MIDDLE FORK WILLAMETTE RIVER NEAR OAKRIDGE, OR

LOCATION.--Lat 43°35'50", long 122°27'20", in NW¼NE¼ sec.9, T.23 S., R.3 E., Lane County, Hydrologic Unit 17090001, in Willamette National Forest, on right bank 0.2 mi (0.3 km) upstream from Windfall Creek, 8.3 mi (13.4 km) upstream from Hills Creek Dam, 10.2 mi (16.4 km) south of Oakridge, and at mile 240.8 (387.4 km).

DRAINAGE AREA.--258 mi² (668 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,556.83 ft (474.522 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to June 21, 1967, at site 0.5 mi (0.8 km) upstream at different datums. June 22, 1967, to June 23, 1971, water-stage recorder at same site at datum 5.00 ft (1.524 m) higher.

REMARKS.--Water-discharge records good. No regulation or diversion above station.

AVERAGE DISCHARGE.--22 years, 800 ft³/s (22.66 m³/s), 42.11 in/yr (1,070 mm/yr), 579,600 acre-ft/yr (715 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,800 ft³/s (1,130 m³/s) Dec. 22, 1964, gage height, 16.96 ft (5.169 m), from floodmark, site and datum then in use, from rating curve extended above 5,100 ft³/s (144 m³/s) on basis of slope-area measurement of peak flow; minimum, 187 ft³/s (5.30 m³/s) Sept. 15, 16, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,500 ft³/s (99.1 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 3	0230	3,870	110	8.50	2.591	Jan. 13	2000	*19,200	544	*12.57	3.831

Minimum, 213 ft³/s (6.03 m³/s) Oct. 9-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	219	634	623	739	651	990	558	888	548	440	277	238
2	219	543	1670	757	710	888	538	867	579	427	277	241
3	216	502	2960	739	1160	853	523	839	585	418	277	241
4	216	585	2050	733	1130	819	533	846	585	410	274	235
5	216	813	1770	1410	990	792	569	881	612	405	274	232
6	216	674	1350	1440	1020	779	663	867	617	397	274	232
7	216	574	1130	1130	946	735	663	792	628	389	271	232
8	216	507	978	984	909	704	773	741	612	381	268	229
9	216	463	877	903	839	657	1220	779	601	377	268	226
10	213	429	890	864	767	617	1260	806	585	401	265	226
11	213	400	794	825	723	628	1080	786	574	373	262	223
12	213	378	733	6280	669	623	1010	773	585	362	259	229
13	213	361	686	17200	628	853	1140	741	634	354	259	238
14	230	349	640	10200	612	1550	1320	723	612	350	259	232
15	251	337	601	4350	590	1110	1240	680	579	346	259	229
16	226	424	564	2750	569	916	1170	640	558	339	256	226
17	222	487	548	2310	569	888	1270	606	548	335	256	223
18	279	623	527	1820	612	888	1280	601	533	328	259	262
19	757	574	527	1480	669	860	1250	595	518	324	256	253
20	585	517	538	1250	716	853	1580	606	508	321	253	253
21	487	478	727	1090	674	786	1640	617	499	317	250	256
22	396	574	727	983	729	750	1360	640	494	314	250	238
23	497	788	663	895	792	700	1220	623	523	314	247	232
24	492	1880	692	839	735	650	1180	606	489	310	247	229
25	964	1520	646	786	767	650	1110	585	543	307	244	226
26	686	1080	590	735	916	650	1080	579	553	300	244	223
27	553	877	553	686	968	650	1110	563	518	297	244	223
28	492	757	527	645	1090	650	1160	553	485	293	241	220
29	448	680	507	623	1100	600	1100	548	466	293	241	220
30	468	646	517	623	---	600	968	533	453	284	241	217
31	727	---	580	579	---	600	---	533	---	280	241	---
TOTAL	11562	19454	27185	66648	23250	24289	31568	21437	16624	10786	7993	6984
MEAN	373	648	877	2150	802	784	1052	692	554	348	258	233
MAX	964	1880	2960	17200	1160	1550	1640	888	634	440	277	262
MIN	213	337	507	579	569	600	523	533	453	280	241	217
CFSM	1.45	2.51	3.40	8.33	3.11	3.04	4.08	2.68	2.15	1.35	1.00	.90
IN.	1.67	2.80	3.92	9.61	3.35	3.50	4.55	3.09	2.40	1.56	1.15	1.01
AC-FT	22930	38590	53920	132200	46120	48180	62620	42520	32970	21390	15850	13850

CAL YR 1979 TOTAL 269598 MEAN 739 MAX 6620 MIN 213 CFSM 2.86 IN 38.87 AC-FT 534700
WTR YR 1980 TOTAL 267780 MEAN 732 MAX 17200 MIN 213 CFSM 2.84 IN 38.61 AC-FT 531100

14144800 MIDDLE FORK WILLAMETTE RIVER NEAR OAKRIDGE, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1958 to January 1959, September 1959 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 23.0°C July 15, 1970; minimum, 0.0°C on several days during winter period most years.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 22.0°C July 21; minimum not recorded.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	14.0	9.5	8.5	6.5	7.5	5.5	7.5	6.0		---		
2	15.0	9.5	8.5	7.5	8.0	7.5	6.5	5.0		---		
3	15.0	10.0	9.0	7.5	8.5	7.5	7.5	6.5		---		
4	15.0	10.0	8.5	8.0	7.5	7.0	7.0	6.5		---		
5	15.0	10.0	9.5	8.0	7.0	6.0	7.5	6.5		4.0		
6	14.0	11.0	9.5	7.5	6.5	5.5	6.5	5.0		---		
7	14.5	11.5	9.0	6.5	7.0	5.5	5.5	4.5		---		
8	15.0	11.0	8.5	5.5	7.5	5.5	5.5	5.0		---		
9	14.5	9.0	8.0	5.5	7.5	6.0	6.0	5.0		---		
10	14.0	9.0	7.5	4.5	7.5	5.0	5.0	3.5		---		
11	14.0	9.0	7.5	4.5	5.0	3.5	5.5	3.0		---		
12	13.5	9.0	7.0	4.5	5.5	4.0	7.0	5.5		---		
13	14.0	10.0	7.5	4.5	5.5	4.0	7.5	7.0		---		
14	12.0	11.0	7.5	4.5	5.5	4.0	7.5	6.5		---		
15	13.5	10.5	7.5	4.5	5.0	3.5	7.0	6.0		---		
16	13.5	9.5	8.5	7.5	5.5	3.5	7.5	6.0		---		
17	13.0	10.0	9.0	7.5	7.5	5.0	6.0	4.0		---		
18	10.5	9.5	7.5	5.5	7.5	6.5	4.0	2.5		---		
19	9.5	8.5	7.5	6.0	7.5	7.0	3.5	1.5		---		
20	9.0	8.0	6.5	5.0	7.5	6.5	4.5	2.5		---		
21	10.0	7.5	6.0	4.0	7.0	6.0	4.0	1.5		---		
22	9.5	8.5	7.0	5.5	6.0	4.5	---	---		---		
23	10.5	9.0	6.5	5.5	5.5	4.5	---	---		---		
24	11.0	9.5	7.5	6.0	6.5	5.5	---	---		---		
25	10.5	9.5	6.5	5.5	6.5	5.0	---	---		---		
26	11.0	9.0	6.5	5.0	5.5	4.5	---	---		---		
27	11.5	9.0	5.5	4.0	5.0	3.5	---	---		---		
28	10.0	8.5	6.0	4.5	5.0	3.5	---	---		---		
29	10.0	8.0	6.5	5.0	6.5	5.0	---	---		---		
30	9.0	7.5	7.0	5.5	7.5	5.0	---	---				
31	10.0	8.0	---	---	7.0	6.0	---	---				
MONTH	15.0	7.5	9.5	4.0	8.5	3.5	7.5	1.5		4.0		

14144800 MIDDDLE FORK WILLAMETTE RIVER NEAR OAKRIDGE, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1		4.5		---	---	---	19.0	11.0	20.0	13.5	17.0	10.0
2		---		---	---	---	18.5	12.0	20.0	12.5	14.0	11.5
3		---		---	---	---	15.5	11.5	19.5	13.5	16.5	11.0
4		---		---	---	---	14.5	11.5	19.0	12.0	17.0	10.0
5		---		---	---	---	14.5	11.5	18.0	12.0	17.5	10.5
6		---		---	---	---	17.5	11.5	18.0	11.0	17.5	11.5
7		---		---	---	---	19.0	11.5	19.0	11.0	17.5	12.0
8		---		---	---	---	19.0	12.5	19.0	12.5	17.0	10.0
9		---		---	---	---	16.0	12.5	19.5	12.0	17.5	11.0
10		---		---	---	---	18.5	12.0	20.0	12.5	17.5	12.0
11		---		---	13.0	---	18.5	11.5	18.5	13.0	17.0	11.5
12		---		---	12.5	9.5	19.0	12.5	19.0	12.0	13.5	11.5
13		---		---	11.0	9.5	18.5	11.5	19.0	12.0	13.0	10.5
14		---		---	11.0	9.0	16.0	13.0	19.0	13.0	14.0	9.0
15		---		---	16.5	9.5	19.5	11.5	18.0	11.5	15.0	9.0
16		---		---	12.5	10.5	19.5	12.5	18.5	11.5	15.5	9.5
17		---		---	16.5	10.0	19.5	12.5	17.0	11.5	15.5	10.0
18		---		---	17.0	10.0	19.0	12.5	15.0	12.5	13.0	11.5
19		---		---	17.0	10.0	19.5	12.0	17.5	10.0	14.0	11.0
20		---		---	18.0	11.5	21.0	12.5	18.0	11.0	13.0	11.0
21		---		---	17.0	11.5	22.0	13.5	17.5	10.5	14.0	10.0
22		---		---	14.0	11.5	21.5	14.5	17.5	10.5	14.0	8.5
23		---		---	14.0	10.5	20.5	15.0	18.0	11.0	14.5	9.0
24		---		---	13.0	10.5	20.0	13.0	18.0	11.0	15.0	9.5
25		---		---	13.0	10.5	20.0	12.5	18.0	11.0	15.0	9.5
26		---		---	14.0	10.0	21.0	13.0	17.5	11.0	15.0	10.5
27		---		---	17.0	9.5	21.0	13.5	17.5	12.0	14.5	10.0
28		---		8.0	18.0	10.5	21.5	14.0	16.5	11.0	15.5	10.5
29		---		---	17.5	11.0	20.5	13.5	14.0	10.0	14.5	9.5
30		---		---	18.0	10.5	20.5	13.0	14.5	9.5	15.0	10.0
31				---	---	---	20.5	14.0	17.0	11.0	---	---
MONTH		4.5		8.0	18.0	9.0	22.0	11.0	20.0	9.5	17.5	8.5

14144900 HILLS CREEK ABOVE HILLS CREEK LAKE, NEAR OAKRIDGE, OR

LOCATION.--Lat 43°40'50", long 122°22'10", in NW¼NW¼ sec.8, T.22 S., R.4 E., Lane County, Hydrologic Unit 17090001, in Willamette National Forest, on right bank 0.2 mi (0.3 km) downstream from Tufti Creek, 0.7 mi (1.1 km) upstream from Hills Creek Lake, 6.5 mi (10.5 km) southeast of Oakridge, and at mile 4.1 (6.6 km).

DRAINAGE AREA.--52.7 mi² (136.5 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1958 to current year. Prior to October 1971, published as Hills Creek above Hills Creek Reservoir.

GAGE.--Water-stage recorder. Datum of gage is 1,630.80 ft (497.068 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Water-discharge records good. No regulation or diversion above station.

AVERAGE DISCHARGE.--22 years, 151 ft³/s (4.276 m³/s), 38.91 in/yr (988 mm/yr), 109,400 acre-ft/yr (135 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,700 ft³/s (303 m³/s) Dec. 22, 1964, gage height, 12.23 ft (3.728 m), from rating curve extended above 1,800 ft³/s (51.0 m³/s) on basis of slope-area measurement of peak flow; minimum, 14 ft³/s (0.40 m³/s) Nov. 1, 1958.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft³/s (19.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 2	2400	883	25.0	5.67	1.728	Jan. 13	1830	*2,960	83.8	*8.08	2.463

Minimum, 16 ft³/s (0.45 m³/s) Oct. 10-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	115	116	132	117	135	100	162	169	93	38	29
2	17	98	464	131	128	120	98	154	197	91	38	29
3	17	88	639	132	220	119	98	146	224	88	37	30
4	17	96	439	131	200	116	98	158	231	86	37	29
5	17	115	365	329	175	113	101	164	230	82	37	28
6	17	101	272	319	165	109	116	160	239	79	37	28
7	17	85	214	237	137	106	119	135	234	75	36	28
8	17	84	178	192	123	103	159	124	209	71	36	28
9	17	73	158	167	113	97	301	135	187	70	35	27
10	16	65	175	147	106	93	282	156	163	77	34	27
11	16	59	146	149	101	96	224	182	142	67	33	27
12	16	54	133	1090	95	93	213	200	142	64	33	28
13	16	50	121	2340	91	125	278	196	166	61	32	30
14	22	47	111	1600	88	337	323	182	157	60	32	28
15	24	44	102	837	88	233	286	160	140	58	32	27
16	20	63	93	543	87	172	267	140	129	56	32	26
17	19	79	88	454	88	161	300	127	120	54	32	25
18	28	103	83	358	91	164	290	122	111	52	32	34
19	159	94	86	287	94	153	283	121	104	51	32	32
20	110	85	88	239	96	156	377	122	99	49	31	32
21	100	77	124	205	90	142	383	123	94	48	31	37
22	80	138	127	180	95	126	320	133	92	47	30	30
23	100	173	125	163	99	118	290	121	112	46	30	28
24	106	344	152	152	96	112	268	119	98	45	30	27
25	257	302	132	140	103	108	239	142	121	44	30	26
26	138	215	114	130	161	108	231	176	151	43	29	26
27	103	167	101	122	161	107	243	184	141	42	30	25
28	96	139	91	114	173	102	252	180	120	41	29	25
29	80	125	87	108	155	104	229	177	108	40	29	25
30	84	119	89	106	---	101	182	164	100	40	29	25
31	164	---	103	102	---	101	---	150	---	39	29	---
TOTAL	1907	3397	5316	11336	3536	4030	6950	4715	4530	1859	1012	846
MEAN	61.5	113	171	366	122	130	232	152	151	60.0	32.6	28.2
MAX	257	344	639	2340	220	337	383	200	239	93	38	37
MIN	16	44	83	102	87	93	98	119	92	39	29	25
CFSM	1.17	2.14	3.25	6.95	2.32	2.47	4.40	2.88	2.87	1.14	.62	.54
IN.	1.35	2.40	3.75	8.00	2.50	2.84	4.91	3.33	3.20	1.31	.71	.60
AC-FT	3780	6740	10540	22480	7010	7990	13790	9350	8990	3690	2010	1680

CAL YR 1979 TOTAL 50102 MEAN 137 MAX 1020 MIN 16 CFSM 2.60 IN 35.37 AC-FT 99380
WTR YR 1980 TOTAL 49434 MEAN 135 MAX 2340 MIN 16 CFSM 2.56 IN 34.89 AC-FT 98050

14144900 HILLS CREEK ABOVE HILLS CREEK LAKE, NEAR OAKRIDGE, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1958 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 22.5°C Aug. 7, 1972; minimum, 0.0°C Jan. 19-25, 1962, Jan. 5-11, 1974, Feb. 4-7, 1976, Nov. 12-14, 1978.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 20.0°C July 27, 28; minimum not recorded.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	13.5	10.5	---	---	6.0	4.5	6.0	5.0	---	---	6.5	4.5
2	14.0	10.5	---	---	7.0	6.0	5.5	4.0	---	---	7.0	5.5
3	14.5	11.5	---	---	7.0	6.5	6.0	5.0	---	---	6.5	6.0
4	14.5	12.0	---	---	7.5	6.5	6.0	5.0	---	---	7.0	5.5
5	13.5	12.0	---	---	7.0	5.0	6.0	4.5	---	---	7.0	5.5
6	13.5	12.5	---	---	6.0	5.0	5.0	3.5	---	---	6.5	5.0
7	13.5	10.5	---	---	6.0	4.5	4.0	3.0	5.0	4.0	7.0	4.0
8	13.5	10.5	7.0	5.5	6.5	5.0	4.5	3.5	5.0	3.5	6.5	4.5
9	13.5	11.0	6.5	5.0	6.5	5.5	4.5	3.0	5.0	3.5	7.0	4.5
10	---	---	6.0	4.0	6.5	3.5	3.0	2.0	5.5	4.0	7.5	4.0
11	---	---	5.5	4.0	3.5	2.5	4.0	2.0	5.0	3.5	6.5	4.0
12	---	---	5.5	4.0	4.5	2.5	5.5	4.0	5.0	3.0	6.5	3.5
13	---	---	5.5	4.0	4.0	3.0	5.5	5.0	5.0	3.0	5.5	4.5
14	---	---	6.0	4.0	4.0	3.0	5.5	5.0	5.0	3.5	4.5	4.0
15	---	---	6.5	4.0	3.5	2.5	---	---	6.5	4.0	4.5	3.5
16	---	---	7.5	6.5	4.5	2.5	---	---	6.0	5.0	5.5	3.5
17	---	---	7.5	6.5	6.5	4.0	---	---	7.0	5.0	5.5	4.0
18	---	---	6.5	4.5	6.5	6.0	---	---	7.0	5.5	5.5	4.0
19	---	---	6.5	5.0	6.5	6.0	---	---	6.5	5.0	6.5	4.5
20	---	---	5.0	3.5	6.5	5.5	---	---	6.0	5.0	5.5	4.5
21	---	---	5.0	3.0	6.0	5.0	---	---	6.0	4.0	5.5	4.5
22	---	---	6.0	4.5	5.0	3.5	---	---	5.5	4.5	6.0	4.0
23	---	---	5.5	5.0	4.5	3.5	---	---	6.0	4.0	6.0	3.5
24	---	---	7.0	5.5	5.5	4.5	---	---	7.0	5.0	6.5	4.0
25	---	---	5.5	4.5	5.5	4.5	---	---	6.0	5.0	7.5	4.0
26	---	---	5.0	4.0	4.5	3.5	---	---	7.0	5.5	6.5	4.5
27	---	---	4.0	3.0	4.0	3.0	---	---	8.5	6.0	6.5	4.0
28	---	---	4.5	3.5	4.0	3.0	---	---	7.0	5.5	7.0	3.5
29	---	---	5.0	4.0	5.0	4.0	---	---	6.5	4.5	7.0	4.0
30	---	---	6.0	4.5	5.5	4.0	---	---	---	---	6.5	4.0
31	---	---	---	---	6.0	5.0	---	---	---	---	5.5	4.0
MONTH	14.5	10.5	7.5	3.0	7.5	2.5	6.0	2.0	8.5	3.0	7.5	3.5

14144900 HILLS CREEK ABOVE HILLS CREEK LAKE, NEAR OAKRIDGE, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.0	4.0	12.0	7.5	9.0	---	---	19.0	14.0			
2	6.5	3.5	10.5	7.5	---	---	---	18.5	13.0			
3	7.0	3.5	13.0	7.0	---	---	---	17.5	14.0			
4	7.0	4.5	14.0	8.0	---	---	---	---	---			
5	7.0	5.0	12.0	9.5	---	---	---	---	---			
6	5.5	3.5	11.0	7.5	---	---	---	---	---			
7	5.5	3.5	13.0	7.5	---	---	---	---	---			
8	6.5	4.5	11.5	7.5	---	---	---	---	---			
9	6.0	4.5	10.0	7.0	---	---	---	---	---			
10	6.5	4.0	8.5	7.0	---	---	---	---	---			
11	8.0	4.0	9.5	7.0	---	---	---	---	---			
12	9.0	5.0	11.0	7.5	---	---	---	---	---			
13	8.5	5.5	10.5	7.0	---	---	---	---	---			
14	6.5	5.5	11.0	6.5	---	---	---	---	---			
15	8.0	5.5	10.5	7.0	---	---	---	---	---			
16	9.5	6.0	12.5	7.5	---	---	---	---	---			
17	9.0	6.5	13.5	7.5	---	---	---	---	---			
18	9.5	6.0	14.0	9.0	---	---	---	---	---			
19	9.0	7.0	15.5	10.0	---	---	---	---	---			
20	8.0	6.5	16.0	10.5	---	---	---	---	---			
21	6.5	6.0	14.0	10.5	---	---	---	---	---			
22	8.0	6.0	10.5	8.0	---	---	---	---	---			
23	9.0	6.5	10.0	7.5	---	---	---	---	---			
24	8.5	7.0	---	---	---	18.5	---	---	---			
25	10.5	7.0	---	---	---	18.5	12.5	---	---			
26	11.0	7.5	---	---	---	19.5	13.5	---	---			
27	12.0	8.5	---	---	---	20.0	---	---	---			
28	10.0	7.0	---	---	---	20.0	14.5	---	---			
29	9.5	7.0	11.0	---	---	19.0	14.0	---	---			
30	10.0	7.0	11.5	6.5	---	19.0	13.5	---	---			
31	---	---	12.5	8.0		19.5	14.5	---	---			
MONTH	12.0	3.5	16.0	6.5	9.0	20.0	12.5	19.0	13.0			

14145100 HILLS CREEK LAKE NEAR OAKRIDGE, OR

LOCATION.--Lat 43°42'30", long 122°25'25", in NW¼ sec.35, T.21 S., R.3 E., Lane County, Hydrologic Unit 17090001, in Willamette National Forest, near right end of Hills Creek Dam on Middle Fork Willamette River, 600 ft (183 m) downstream from Hills Creek, 3.5 mi (5.6 km) southeast of Oakridge, and at mile 232.5 (374.1 km).

DRAINAGE AREA.--389 mi² (1,008 km²).

PERIOD OF RECORD.--August 1961 to current year. Prior to October 1971, published as Hills Creek Reservoir near Oakridge.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by earthfill dam with concrete spillway completed in 1961 by the Corps of Engineers; storage began August 1961. Total capacity is 355,600 acre-ft (438 hm³) at elevation 1,543.0 ft (470.31 m), top of spillway gates, and usable capacity is 248,900 acre-ft (307 hm³) between elevations 1,414.0 ft (430.98 m), minimum power pool, and 1,543.0 ft (470.31 m). Reservoir used for flood control and power generation. Figures given herein represent total contents.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 354,200 acre-ft (437 hm³) June 25, 1971, elevation, 1,542.52 ft (470.160 m); minimum, 104,800 acre-ft (129 hm³) Jan. 2, 1969, elevation, 1,412.52 ft (430.536 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 350,400 acre-ft (432 hm³) July 3, elevation, 1,541.13 ft (469.736 m); minimum, 155,300 acre-ft (191 hm³) Dec. 20, 21, elevation, 1,447.98 ft (441.344 m).

Capacity table (elevation, in feet, and total contents, in acre-feet)

1,410	101,500	1,460	174,900	1,520	297,200
1,420	114,600	1,480	211,000	1,540	347,300
1,440	143,000	1,500	251,900	1,544	358,500

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1490.96	1469.30	1452.88	1448.40	1474.54	1488.20	1511.40	1535.07	1541.03	1541.09	1540.41	1515.43
2	1490.27	1468.81	1454.13	1448.49	1473.72	1489.04	1511.93	1535.38	1541.04	1541.12	1539.76	1514.76
3	1489.59	1468.23	1457.48	1448.50	1473.59	1489.83	1512.42	1535.94	1541.05	1541.12	1539.01	1514.35
4	1488.87	1467.80	1458.99	1448.50	1473.46	1490.67	1512.92	1536.53	1541.04	1541.09	1538.27	1513.74
5	1488.18	1467.39	1460.05	1449.40	1473.03	1491.40	1513.51	1537.17	1541.07	1541.08	1537.52	1513.08
6	1487.46	1466.76	1460.33	1450.45	1472.70	1492.12	1514.19	1537.75	1541.09	1541.05	1536.70	1512.34
7	1486.76	1466.20	1460.12	1450.72	1472.27	1492.78	1514.78	1538.26	1541.04	1541.03	1535.89	1511.58
8	1486.03	1465.55	1459.65	1450.42	1472.41	1493.40	1515.62	1538.73	1541.03	1541.01	1535.08	1510.82
9	1485.30	1464.83	1459.07	1449.91	1473.21	1493.95	1517.21	1539.29	1541.02	1541.01	1534.27	1509.94
10	1484.57	1464.07	1458.57	1449.28	1473.90	1494.48	1518.68	1539.90	1541.01	1541.04	1533.45	1509.19
11	1483.83	1463.27	1457.68	1448.67	1474.57	1495.05	1519.79	1540.47	1541.01	1541.04	1532.64	1508.41
12	1483.03	1462.43	1456.81	1456.94	1475.13	1495.58	1520.88	1540.80	1541.04	1541.03	1531.80	1507.69
13	1482.29	1461.55	1455.72	1473.64	1475.67	1496.40	1522.07	1540.93	1541.04	1541.02	1530.96	1507.91
14	1481.61	1460.67	1454.55	1483.84	1476.15	1498.67	1523.47	1540.95	1541.02	1541.02	1530.13	1506.14
15	1480.90	1459.77	1453.40	1487.60	1476.60	1500.34	1524.83	1540.93	1541.00	1541.03	1529.27	1505.33
16	1480.16	1459.03	1452.18	1488.65	1477.03	1501.40	1526.11	1540.85	1540.99	1541.04	1528.43	1504.55
17	1479.41	1458.38	1450.98	1489.00	1477.47	1502.34	1527.42	1540.75	1541.03	1541.03	1527.56	1503.78
18	1478.80	1458.01	1449.58	1488.77	1477.96	1503.36	1528.73	1540.68	1541.02	1541.01	1526.93	1503.13
19	1478.64	1457.51	1448.47	1487.94	1478.54	1504.25	1529.96	1540.72	1541.01	1541.01	1526.29	1502.37
20	1477.69	1456.90	1447.98	1486.76	1479.17	1505.12	1531.70	1540.78	1541.02	1541.00	1525.63	1501.66
21	1476.54	1456.21	1448.12	1485.30	1479.74	1505.88	1533.17	1540.90	1541.03	1540.99	1524.92	1500.90
22	1475.27	1455.87	1448.06	1483.70	1480.60	1506.56	1534.04	1541.00	1541.01	1540.98	1523.93	1500.12
23	1474.34	1455.95	1448.08	1482.38	1481.40	1507.16	1534.75	1541.01	1541.06	1540.98	1523.01	1499.40
24	1473.48	1457.74	1448.10	1481.78	1482.10	1507.70	1535.26	1540.99	1541.03	1540.99	1522.07	1498.60
25	1473.55	1458.58	1448.03	1481.08	1482.82	1508.20	1535.27	1540.98	1541.06	1540.99	1521.14	1497.86
26	1472.87	1458.45	1448.10	1480.30	1483.80	1508.72	1535.27	1541.00	1541.09	1541.02	1520.20	1497.09
27	1471.95	1457.66	1448.07	1479.40	1484.83	1509.22	1535.27	1541.01	1541.08	1541.04	1519.26	1496.41
28	1470.97	1456.61	1448.01	1478.45	1486.04	1509.66	1535.30	1540.98	1541.04	1541.03	1518.32	1495.86
29	1469.73	1455.44	1448.06	1477.45	1487.20	1510.11	1535.28	1540.99	1541.00	1541.02	1517.48	1495.07
30	1469.56	1454.18	1448.11	1476.45	---	1510.53	1535.16	1540.99	1541.03	1540.99	1516.80	1494.31
31	1469.65	---	1448.23	1475.44	---	1510.95	---	1540.99	---	1540.82	1516.12	---
MEAN	1480.07	1461.11	1452.83	1469.92	1477.57	1500.42	1524.88	1539.77	1541.03	1541.02	1528.49	1505.06
MAX	1490.96	1469.30	1460.33	1489.00	1487.20	1510.95	1535.30	1541.01	1541.09	1541.12	1540.41	1515.43
MIN	1469.56	1454.18	1447.98	1448.40	1472.27	1488.20	1511.40	1535.07	1540.99	1540.82	1516.12	1494.31
(†)	191700	165300	155700	202300	225100	276200	334700	350000	350100	349500	288100	239700
(‡)	-43700	-26400	-9600	+46600	+22800	+51100	+58500	+15300	+100	-600	-61400	-48400

CAL YR 1979 MEAN 1500.58 MAX 1541.68 MIN 1435.84 AC-FT‡ +500
WTR YR 1980 MEAN 1501.91 MAX 1541.12 MIN 1447.98 AC-FT‡ +4300

† Contents, in acre-feet, at 2400, on last day of month.
‡ Change in contents, in acre-feet.

14145500 MIDDLE FORK WILLAMETTE RIVER ABOVE SALT CREEK, NEAR OAKRIDGE, OR

LOCATION.--Lat 43°43'20", long 122°26'15", in NW¼NE¼ sec.27, T.21 S., R.3 E., Lane County, Hydrologic Unit 17090001, in Willamette National Forest, on right bank 90 ft (27 m) upstream from highway bridge, 0.4 mi (0.6 km) upstream from Salt Creek, 1.1 mi (1.8 km) downstream from Hills Creek Dam, 2.3 mi (3.7 km) southeast of Oakridge, and at mile 231.4 (372.3 km).

DRAINAGE AREA.--392 mi² (1,015 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1913 to September 1914, September 1935 to current year. Monthly discharge only September 1935, published in WSP 1318.

REVISED RECORDS.--WSP 1248: 1914.

GAGE.--Water-stage recorder. Datum of gage is 1,208.01 ft (368.201 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Oct. 3, 1913, to Sept. 30, 1914, nonrecording gage and Sept. 1, 1935, to Aug. 18, 1960, water-stage recorder at sites 400 ft (122 m) and 1,000 ft (305 m) downstream, respectively, at different datum.

REMARKS.--Water-discharge records good. Flow regulated since 1961 by Hills Creek Lake (see station 14145100). No diversions above station.

AVERAGE DISCHARGE.--46 years, 1,141 ft³/s (32.31 m³/s), 39.53 in/yr (1,004 mm/yr), 826,700 acre-ft/yr (1.02 km³/yr), adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 34,000 ft³/s (963 m³/s) Dec. 28, 1945, gage height, 12.06 ft (3.676 m), site and datum then in use, from rating curve extended above 13,000 ft³/s (368 m³/s); minimum observed, 0.70 ft³/s (0.020 m³/s) Sept. 8-11, 13, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,610 ft³/s (102 m³/s) Jan. 20, gage height, 5.85 ft (1.783 m); minimum observed, 6.8 ft³/s (0.19 m³/s) Apr. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1510	1210	1820	926	1660	302	184	1250	765	472	882	1110
2	1010	1190	1820	1020	1660	302	90	649	907	495	1190	1100
3	1010	1190	1830	1050	1660	302	149	302	979	519	1320	946
4	1010	1190	1820	1070	1660	271	106	302	946	543	1310	999
5	1010	1430	1720	1580	1660	298	177	302	920	519	1340	1030
6	1010	1430	1690	1480	1690	298	295	302	1010	514	1380	1180
7	1020	1200	1720	1510	1640	302	291	312	1070	481	1390	1160
8	1020	1200	1660	1680	959	302	285	309	946	449	1390	1170
9	1020	1200	1610	1680	305	302	288	312	920	431	1390	1160
10	1020	1190	1590	1670	291	302	288	309	844	431	1380	1150
11	1030	1190	1730	1670	302	305	295	309	759	431	1380	1150
12	1030	1190	1680	1660	305	305	288	605	796	431	1380	1150
13	1030	1190	1720	1490	298	312	291	901	875	414	1390	1160
14	1030	1160	1730	1660	295	312	221	993	863	385	1390	1160
15	1030	1170	1670	2410	295	302	90	986	796	377	1390	1170
16	1030	1200	1670	2930	291	298	77	986	765	373	1400	1160
17	1030	1190	1660	2890	302	298	82	986	649	381	1390	1150
18	1030	1190	1650	2760	302	298	82	901	694	381	1120	1150
19	1470	1190	1550	2850	302	302	83	759	649	365	1100	1150
20	1800	1200	1080	2860	298	305	86	729	589	353	1130	1150
21	1800	1190	926	2870	302	302	327	677	611	353	1170	1150
22	1620	1190	1150	2870	298	298	723	759	632	342	1450	1150
23	1590	1190	979	2420	302	298	759	875	638	312	1450	1120
24	1530	1400	1120	1660	298	295	953	894	688	315	1440	1150
25	1540	1560	1070	1710	298	295	1470	888	694	316	1440	1150
26	1580	1720	772	1700	305	298	1480	882	741	271	1440	1110
27	1610	1820	832	1690	295	298	1470	933	753	298	1440	1040
28	1580	1830	741	1690	295	295	1470	913	729	327	1430	869
29	1580	1820	643	1690	302	291	1470	826	688	323	1310	1120
30	820	1810	643	1680	---	291	1440	814	589	334	1110	1130
31	1060	---	688	1660	---	291	---	759	---	543	1100	---
TOTAL	38460	39830	42984	58486	18870	9270	15310	21724	23505	12479	40822	33544
MEAN	1241	1328	1387	1887	651	299	510	701	784	403	1317	1118
MAX	1800	1830	1830	2930	1690	312	1480	1250	1070	543	1450	1180
MIN	820	1160	643	926	291	271	77	302	589	271	882	869
AC-FT	76290	79000	85260	116000	37430	18390	30370	43090	46620	24750	80970	66530
MEAN†	530	884	12230	2612	1047	1130	1493	950	785	393	318	305
CFSM†	1.35	2.26	3.14	6.66	2.67	2.88	3.81	2.42	2.00	1.00	.81	.78
IN.†	1.56	2.52	3.62	7.68	2.88	3.32	4.25	2.79	2.24	1.16	.94	.87
AC-FT†	32590	52600	75660	160600	60230	69490	88870	58390	46720	24150	19570	18130

CAL YR 1979 TOTAL 388524 MEAN 1064 MAX 2760 MIN 104 AC-FT 770600 MEAN† 1065 CFSM† 2.72 IN.† 36.89 AC-FT† 771140
WTR YR 1980 TOTAL 355284 MEAN 971 MAX 2930 MIN 77 AC-FT 704700 MEAN† 977 CFSM† 2.49 IN.† 33.92 AC-FT† 709000

† Adjusted for change in contents in Hills Creek Lake.

14145500 MIDDLE FORK WILLAMETTE RIVER ABOVE SALT CREEK, NEAR OAKRIDGE, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1960 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 25.0°C Sept. 4, 1960; minimum, 1.5°C Jan. 4, 1961.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 16.5°C Oct. 1, 8-12, 15, 17; minimum, 4.5°C Jan. 28-31, Feb. 11-14.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	16.5	16.0	14.0	13.5	8.0	7.5	6.0	5.5	5.0	5.0	5.5	5.0
2	16.0	15.0	13.5	13.5	8.0	8.0	6.0	5.5	5.0	5.0	6.0	5.0
3	16.0	15.0	13.5	13.0	8.0	7.5	6.0	5.5	5.0	5.0	5.5	5.0
4	16.0	15.0	13.0	13.0	8.0	7.5	6.0	6.0	5.0	5.0	7.5	5.0
5	16.0	15.0	13.0	12.5	8.0	7.5	6.0	5.5	5.0	5.0	6.0	5.0
6	16.0	15.0	13.0	12.5	8.0	7.5	5.5	5.5	5.0	5.0	6.0	5.0
7	16.0	15.0	13.0	12.5	7.5	7.5	5.5	5.5	5.0	5.0	6.0	5.0
8	16.5	15.0	12.5	12.0	7.5	7.5	5.5	5.5	5.5	5.0	6.0	5.0
9	16.5	15.5	12.5	12.0	7.5	6.5	5.5	5.5	5.5	5.0	6.5	5.0
10	16.5	15.5	12.0	11.5	7.0	7.0	5.5	5.0	5.5	5.0	6.0	5.0
11	16.5	15.5	12.0	11.5	7.0	6.5	5.5	5.0	5.5	4.5	5.5	5.0
12	16.5	15.5	11.5	11.0	6.5	6.5	5.5	5.5	5.5	4.5	6.0	5.0
13	16.0	15.5	11.5	11.0	6.5	6.5	5.5	5.5	5.5	4.5	6.0	5.5
14	16.0	15.5	11.5	11.0	6.5	6.5	6.0	5.5	5.0	4.5	5.5	5.0
15	16.5	15.5	11.0	10.5	6.5	6.5	6.0	5.5	5.5	5.0	5.5	5.0
16	16.0	15.5	11.0	10.5	6.5	6.0	6.0	5.5	5.5	5.0	6.5	5.0
17	16.5	15.5	11.0	10.5	6.5	6.5	6.0	5.5	5.5	5.0	6.0	5.5
18	16.0	15.5	10.5	10.0	6.5	6.5	5.5	5.5	5.5	5.0	6.5	5.0
19	16.0	15.5	10.0	10.0	6.5	6.5	5.5	5.0	5.5	5.0	6.5	5.0
20	16.0	15.5	10.0	10.0	6.5	6.5	5.5	5.0	6.0	5.0	6.0	5.5
21	15.5	15.5	10.0	9.5	6.5	6.5	5.5	5.5	5.5	5.0	6.0	5.5
22	15.5	15.0	10.0	9.5	6.5	6.0	5.5	5.5	5.5	5.0	6.5	5.5
23	15.5	15.0	9.5	9.0	6.0	6.0	5.5	5.5	6.0	5.0	6.5	5.0
24	15.0	15.0	9.5	9.0	6.0	6.0	5.5	5.0	6.5	5.5	6.5	5.0
25	15.0	14.5	9.0	8.0	6.0	6.0	5.5	5.0	5.5	5.0	6.5	5.0
26	15.0	14.5	8.5	8.0	6.0	6.0	5.0	5.0	5.5	5.5	6.0	5.5
27	14.5	14.0	8.5	8.0	6.0	5.5	5.0	5.0	6.0	5.0	6.5	5.0
28	14.5	14.0	8.5	8.0	6.0	5.5	5.0	4.5	6.0	5.0	6.5	5.0
29	14.5	14.0	8.0	8.0	6.0	5.5	5.0	4.5	6.5	5.0	6.0	5.0
30	14.0	12.5	8.0	7.5	6.0	5.5	5.0	4.5	---	---	6.0	5.0
31	14.0	13.5	---	---	6.0	6.0	5.0	4.5	---	---	6.0	5.5
MONTH	16.5	12.5	14.0	7.5	8.0	5.5	6.0	4.5	6.5	4.5	7.5	5.0

14145500 MIDDLE FORK WILLAMETTE RIVER ABOVE SALT CREEK, NEAR OAKRIDGE, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.5	5.5	7.0	6.5	8.0	6.5	8.5	7.5	10.0	8.5	12.0	11.5
2	---	---	7.0	6.0	7.5	7.0	8.5	7.5	10.0	9.0	12.5	12.0
3	7.5	5.0	8.0	5.5	8.0	7.0	9.0	7.5	10.5	9.5	12.5	11.0
4	7.0	5.5	8.0	5.5	8.0	7.0	9.5	7.5	10.5	9.5	12.5	11.0
5	7.0	5.5	7.5	6.0	7.5	7.0	8.5	7.5	10.5	9.5	13.0	11.0
6	6.0	5.5	7.5	6.0	8.0	7.0	9.0	8.0	10.5	10.0	13.0	12.5
7	6.0	5.5	8.0	5.5	8.0	7.5	9.0	8.0	10.5	10.0	13.0	12.5
8	6.0	5.5	7.0	6.0	8.5	7.0	9.0	8.0	11.0	10.0	13.0	12.5
9	6.5	5.5	7.0	6.0	8.5	7.0	9.0	7.5	10.5	10.0	13.5	12.5
10	7.0	5.5	6.5	6.0	8.5	7.0	9.0	8.0	11.0	10.0	13.5	13.0
11	7.0	5.5	7.0	6.0	8.5	7.0	9.0	7.5	11.0	10.0	14.0	13.0
12	7.5	5.5	7.5	6.0	8.0	7.0	9.0	8.0	11.0	10.0	13.5	13.0
13	7.0	5.5	7.0	6.0	8.0	7.5	9.0	8.0	11.0	10.5	13.5	13.0
14	7.0	6.0	7.5	6.5	8.0	7.5	9.0	8.0	11.0	10.0	13.5	13.0
15	9.5	6.0	7.5	6.5	8.5	7.5	9.5	8.0	11.0	10.5	14.0	13.5
16	10.5	5.5	7.5	6.5	8.5	7.0	9.5	8.0	11.0	10.5	14.0	13.5
17	10.0	6.0	7.5	6.5	9.5	7.0	9.5	8.0	11.5	10.5	14.0	13.5
18	10.5	5.5	7.5	6.0	8.5	7.0	9.5	8.5	11.5	9.5	14.0	13.5
19	9.0	6.5	8.0	6.5	9.0	7.0	9.5	8.0	11.0	10.0	14.5	13.5
20	7.0	6.0	8.0	6.5	9.0	7.0	9.5	8.0	11.5	10.0	14.5	14.0
21	7.5	6.0	7.5	6.5	8.5	7.0	9.5	8.0	11.5	10.0	14.5	14.0
22	6.5	6.0	7.5	6.5	9.0	7.0	9.5	8.0	11.5	11.0	15.0	14.0
23	6.5	6.0	7.5	6.5	8.5	7.0	10.0	8.0	12.0	11.0	15.0	13.0
24	6.5	6.0	7.0	7.0	8.5	7.5	10.0	7.5	12.0	11.5	15.0	14.0
25	7.0	6.5	7.5	6.5	8.5	7.5	10.0	8.0	12.0	11.0	15.0	14.5
26	7.0	6.0	7.0	6.5	8.5	7.5	10.0	8.0	12.0	11.5	15.0	14.5
27	7.5	6.5	7.5	6.5	9.0	7.5	10.0	8.0	12.5	11.5	15.0	13.5
28	7.0	6.5	8.0	6.5	9.0	7.5	10.0	8.0	12.0	11.5	15.0	11.5
29	7.0	6.5	8.0	6.5	9.0	7.5	10.0	8.0	12.5	11.5	15.5	14.5
30	7.0	6.5	8.5	6.5	9.0	7.5	12.5	8.0	12.0	11.5	15.0	14.5
31	---	---	8.0	6.5	---	---	9.5	8.5	12.0	11.5	---	---
MONTH	10.5	5.0	8.5	5.5	9.5	6.5	12.5	7.5	12.5	8.5	15.5	11.0

14146500 SALMON CREEK NEAR OAKRIDGE, OR

LOCATION.--Lat 43°45'45", long 122°22'18", in NE¼ sec.7, T.21 S., R.4 E., Lane County, Hydrologic Unit 17090001, in Willamette National Forest, on right bank 190 ft (58 m) upstream from Salmon Creek Falls, 0.1 mi (0.2 km) upstream from Needle Creek, 4.6 mi (7.4 km) east of Oakridge, and at mile 5.84 (9.40 km).

DRAINAGE AREA.--117 mi^2 (303 km^2), at measuring cable 0.6 mi (1.0 km) downstream from gage.

PERIOD OF RECORD.--October to November 1909 (gage heights and one discharge measurement only), February 1913 to October 1919, October 1933 to current year. Monthly discharge only for some periods, published in WSP 1318. Published as Kelsey River near Hazeldell and Salmon Creek near Hazeldell, 1909.

REVISED RECORDS.--WSP 794: 1934(M). WSP 814: Drainage area. WSP 1124: 1935, 1942(M), 1943, 1946(M). WSP 1248: 1915, 1918. WRD 1971 Oreg.: 1968, 1969(M,P).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,462.36 ft (445.727 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1914, nonrecording gage at several sites within 4 mi (6 km) of present site at various datums. Oct. 1, 1914, to Oct. 14, 1919, water-stage recorder at site 1.8 mi (2.9 km) downstream at different datum. Nov. 5, 1933, to Oct. 27, 1964, water-stage recorder at site 0.8 mi (1.3 km) downstream at datum 40.53 ft (12.354 m) lower. Oct. 28, 1964, to Aug. 27, 1965, nonrecording gage at site 0.6 mi (1.0 km) downstream at different datum.

REMARKS.--Records good except those for periods of no gage-height record Nov. 1-7, July 26 to Sept. 30, which are fair. No regulation or diversion above station. All records given herein are for measuring cable site.

AVERAGE DISCHARGE.--53 years (water years 1914-19, 1934-80), 425 ft^3/s (12.04 m^3/s), 49.33 in/yr (1,253 mm/yr), 307,900 acre-ft/yr (380 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,600 ft^3/s (329 m^3/s) Dec. 22, 1964, gage height, 9.15 ft (2.789 m), from floodmark, site and datum then in use, from rating curve extended above 2,100 ft^3/s (59.5 m^3/s) on basis of slope-area measurement of peak flow; minimum, 63 ft^3/s (1.78 m^3/s) Jan. 8, 1937.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,700 ft^3/s (48.1 m^3/s) and maximum discharge, 4,710 ft^3/s (133 m^3/s) Jan. 13, gage height, 6.15 ft (1.875 m); minimum recorded, 118 ft^3/s (3.34 m^3/s) Oct. 8, 9, 11, 12, but may have been less during period of no gage-height record July 26 to Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	129	300	339	298	307	373	307	453	386	232	150	130
2	129	260	590	298	311	356	294	431	410	224	150	130
3	126	240	917	320	400	352	285	410	448	220	150	140
4	123	260	884	325	395	391	281	416	431	220	150	140
5	121	340	824	803	373	391	298	426	421	213	150	130
6	121	300	684	832	405	386	352	416	421	209	150	130
7	121	260	566	665	395	369	352	386	437	206	150	130
8	118	240	493	578	386	352	416	369	416	202	150	130
9	118	224	453	523	369	329	608	391	395	199	150	130
10	121	213	505	481	352	316	627	400	377	206	150	130
11	118	202	426	448	334	339	572	391	356	195	150	120
12	118	195	391	1410	316	325	547	377	348	192	150	120
13	121	185	373	3840	303	373	627	365	356	188	140	130
14	126	181	348	3470	294	608	739	356	339	185	140	130
15	129	174	329	2180	285	529	691	348	320	181	140	130
16	126	199	307	1460	277	442	658	329	307	178	140	130
17	123	377	298	1180	277	426	705	311	303	174	140	130
18	157	303	294	957	281	442	698	307	285	174	140	140
19	316	277	298	774	285	426	698	303	277	171	140	150
20	272	260	294	665	311	431	840	303	268	167	140	150
21	240	244	343	578	294	410	803	307	264	167	140	170
22	202	281	356	511	303	391	691	329	256	164	130	150
23	220	352	343	464	316	377	633	320	268	164	130	130
24	220	711	343	426	311	356	620	320	256	160	140	130
25	325	698	325	395	307	348	584	356	285	160	130	130
26	260	560	307	377	320	352	572	373	285	160	130	130
27	232	448	290	352	320	352	584	405	264	160	130	130
28	224	386	277	329	373	325	602	410	256	160	130	130
29	220	356	268	311	391	339	566	400	248	160	130	130
30	228	339	264	298	---	329	493	391	236	160	130	130
31	348	---	268	294	---	316	---	377	---	150	130	---
TOTAL	5552	9365	12997	25842	9591	11851	16743	11476	9919	5701	4370	4010
MEAN	179	312	419	834	331	382	558	370	331	184	141	134
MAX	348	711	917	3840	405	608	840	453	448	232	150	170
MIN	118	174	264	294	277	316	281	303	236	150	130	120
CFSM	1.53	2.67	3.58	7.13	2.83	3.27	4.77	3.16	2.83	1.57	1.21	1.15
IN.	1.77	2.98	4.13	8.22	3.05	3.77	5.32	3.65	3.15	1.81	1.39	1.27
AC-FT	11010	18580	25780	51260	19020	23510	33210	22760	19670	11310	8670	7950

CAL YR 1979 TOTAL 141961 MEAN 389 MAX 2120 MIN 118 CFSM 3.33 IN 45.14 AC-FT 281600
WTR YR 1980 TOTAL 127417 MEAN 348 MAX 3840 MIN 118 CFSM 2.97 IN 40.51 AC-FT 252700

14146700 GRAY CREEK NEAR OAKRIDGE, OR

LOCATION.--Lat 43°43'48", long 122°30'38", in NE¼SE¼ sec.24, T.21 S., R.2 E., Lane County, Hydrologic Unit 17090001, Willamette National Forest, on left bank 0.9 mi (1.4 km) upstream from bridge over La Duke Road, and 1.5 mi (2.4 km) southwest of Oakridge.

DRAINAGE AREA.--5.06 mi² (13.11 km²).

PERIOD OF RECORD.--July 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,300 ft (396 m), from topographic map.

REMARKS.--Records good except those for periods of no gage-height record May 30 to June 13 and Aug. 11 to Sept. 30, which are fair. No regulation or diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 411 ft³/s (11.6 m³/s) Dec. 4, 1978, gage height, 3.61 ft (1.100 m); maximum gage height, 3.65 ft (1.113 m) Feb. 7, 1979; minimum daily discharge, 0.26 ft³/s (0.007 m³/s) Sept. 10-12, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 140 ft³/s (3.96 m³/s) and maximum discharge, 379 ft³/s (10.7 m³/s) Jan. 13, gage height, 3.03 ft (0.924 m); minimum daily, 0.26 ft³/s (0.007 m³/s) Sept. 10-12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.33	17	12	15	3.8	12	8.1	4.7	4.8	2.2	.73	.34
2	.31	8.9	65	14	4.2	9.5	7.2	4.2	5.5	2.0	.69	.36
3	.31	6.0	78	15	16	8.1	6.6	3.8	8.0	1.9	.69	.38
4	.31	9.6	56	15	17	8.8	6.9	3.5	11	2.1	.69	.42
5	.31	21	46	96	12	8.8	12	3.3	9.5	1.9	.69	.38
6	.31	12	22	52	14	9.9	29	3.1	8.0	1.8	.69	.34
7	.31	7.3	13	23	15	9.5	26	3.0	7.0	1.6	.64	.30
8	.31	5.1	8.9	17	12	8.5	37	2.8	6.0	1.5	.43	.28
9	.31	3.9	7.1	16	9.5	7.5	82	4.0	5.5	1.5	.43	.28
10	.31	3.2	14	15	7.8	6.9	55	6.6	5.0	1.4	.40	.26
11	.29	2.5	10	14	6.6	12	40	7.8	5.5	1.3	.40	.26
12	.29	2.3	7.9	186	5.7	14	34	6.9	6.0	1.3	.40	.26
13	.31	1.9	6.5	302	4.9	24	38	5.5	7.5	1.2	.40	.28
14	.44	1.8	5.5	176	4.5	93	33	4.7	6.9	1.2	.38	.34
15	.66	1.6	4.6	96	4.0	47	28	4.2	5.7	1.2	.38	.32
16	.47	2.1	4.0	47	3.5	27	23	3.7	4.9	1.1	.36	.32
17	.41	3.9	3.5	58	3.7	24	21	3.3	4.2	1.1	.36	.30
18	1.4	16	3.2	39	4.2	30	17	3.1	3.7	1.1	.38	.30
19	51	15	2.9	25	4.7	26	15	2.8	3.3	1.1	.40	.40
20	27	10	2.9	18	7.8	24	18	2.5	3.0	1.1	.40	.46
21	17	8.6	8.6	14	8.5	20	22	2.4	2.7	1.0	.40	.55
22	7.1	20	14	11	14	16	17	2.8	2.5	1.0	.34	.50
23	7.1	33	12	8.8	24	14	14	3.3	3.0	1.0	.32	.46
24	6.0	83	22	7.5	16	12	12	4.2	2.7	.94	.34	.40
25	39	49	15	6.6	13	11	10	9.5	3.5	.94	.34	.38
26	13	25	9.3	5.7	11	11	8.8	15	4.7	.88	.34	.36
27	8.3	17	6.8	4.9	9.2	14	7.8	13	3.7	.88	.34	.36
28	7.1	12	5.5	4.0	13	12	6.9	11	3.0	.82	.32	.34
29	6.8	9.6	4.8	3.8	15	11	6.3	8.5	2.7	.82	.32	.32
30	7.6	11	5.3	3.7	---	10	5.2	6.9	2.3	.78	.32	.32
31	41	---	7.1	3.5	---	9.2	---	5.0	---	.78	.32	---
TOTAL	245.39	419.3	483.4	1312.5	284.6	550.7	646.8	165.1	151.8	39.44	13.64	10.57
MEAN	7.92	14.0	15.6	42.3	9.81	17.8	21.6	5.33	5.06	1.27	.44	.35
MAX	51	83	78	302	24	93	82	15	11	2.2	.73	.55
MIN	.29	1.6	2.9	3.5	3.5	6.9	5.2	2.4	2.3	.78	.32	.26
CFSM	1.57	2.77	3.08	8.36	1.94	3.52	4.27	1.05	1.00	.25	.09	.07
IN.	1.80	3.08	3.55	9.65	2.09	4.05	4.75	1.21	1.12	.29	.10	.08
AC-FT	487	832	959	2600	565	1090	1280	327	301	78	27	21

CAL YR 1979 TOTAL 5074.22 MEAN 13.9 MAX 233 MIN .29 CFSM 2.75 IN 37.30 AC-FT 10060
WTR YR 1980 TOTAL 4323.24 MEAN 11.8 MAX 302 MIN .26 CFSM 2.33 IN 31.78 AC-FT 8580

14146950 WALDO LAKE NEAR OAKRIDGE, OR

LOCATION.--Lat 43°46'05", long 122°03'10", in SE¼WN¼ sec.7, T.21 S., R.6 E., Lane County, Hydrologic Unit 170900001, Willamette National Forest, on left bank at head of artificial outlet channel for Waldo Lake, at headwaters of the North Fork of the Middle Fork Willamette River, 20 mi (32 km) east of Oakridge, and at mile 43.51 (70.0 km).

DRAINAGE AREA.--30.5 mi^2 (79.0 km^2).

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Nonrecording gage. Altitude of gage is 5,410 ft (1,649.0 m), from topographic map; gage readings have been reduced to National Geodetic Vertical Datum of 1929. Present gage is at same site and datum as former gage for Waldo Lake outlet near Oakridge (see station 14147000) for period 1936-53.

REMARKS.--Lake not regulated. Lake level was lowered approximately 0.5 ft (0.2 m) when low rock dam in artificial outlet channel was removed Sept. 23, 1971. Lake outlet is an old artificial outlet channel 30 ft (9 m) below the gage. Diversion tunnel into head of Black Creek, near south end of lake, built about 1914, is not used; but leakage past old control gates was measured at 0.63 ft^3/s (0.018 m^3/s) Oct. 1, 1979. The maximum stage of the lake during period 1936-53 was 5,412.98 ft (1,649.876 m), which occurred Jan. 2, 1943. At times during this period the lake elevation could have been as much as 2 ft (0.6 m) below elevation 5,410 ft (1,649.0 m). A high-water mark noted Sept. 3, 1936, indicated that an elevation of 5,413.2 ft (1,649.94 m) had occurred sometime previous to that date. See station 14147000 for lake elevations for period 1936-53.

COOPERATION.--Waldo Lake bathymetric chart, used to compute capacity table, furnished by Environmental Protection Agency.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 778,900 acre-ft (960 hm^3) Mar. 18, 1971, elevation, 5,413.25 ft (1,649.969 m); minimum observed, 759,900 acre-ft (937 hm^3) Oct. 1, 1973, elevation, 5,410.22 ft (1,649.035 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 767,900 acre-ft (947 hm^3) July 2, elevation, 5,411.51 ft (1,649.428 m); minimum observed, 761,000 acre-ft (938 hm^3) Oct. 1, elevation, 5,410.40 ft (1,649.090 m).

ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)
Oct. 1	5,410.40	761,000
July 2	5,411.51	767,900
Aug. 28	5,410.50	761,600

14147000 WALDO LAKE OUTLET NEAR OAKRIDGE, OR

LOCATION.--Lat 43°46'05", long 122°03'10", in SE¼NW¼ sec.7, T.21 S., R.6 E., Lane County, Hydrologic Unit 17090001, in Willamette National Forest, on right bank of artificial outlet channel of Waldo Lake forming the headwaters of the North Fork of the Middle Fork of Willamette River, 20 mi (32 km) east of Oakridge, and at mile 43.5 (70.0 km).

DRAINAGE AREA.--30.5 mi^2 (79.0 km^2), of which about 10.5 mi^2 (27.2 km^2) is Waldo Lake.

PERIOD OF RECORD.--October 1936 to September 1953, October 1969 to current year.

REVISED RECORDS.--WSP 2135: Drainage area.

GAGE.--Water-stage recorder and modified v-notch weir. Altitude of gage is 5,410 ft (1,649 m), from topographic map. October 1936 to September 1953, at site 120 ft (37 m) upstream on left bank at same datum.

REMARKS.--Records good. At times seiches from Waldo Lake cause rapid changes in stage at gage many times each hour. No regulation. Diversion tunnel into head of Black Creek, near south end of lake, built about 1914, is sealed off, but there was leakage of about 0.63 ft^3/s (0.018 m^3/s) past control gates, measured Oct. 1, 1979.

AVERAGE DISCHARGE.--28 years, 34.2 ft^3/s (0.969 m^3/s), 24,780 acre-ft/yr (30.6 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 150 ft^3/s (4.25 m^3/s) Jan. 20, 1971, from rating curve extended above 77 ft^3/s (2.18 m^3/s) and adjusted for overbank flow; maximum gage height, 2.98 ft (0.908 m) Jan. 2, 1943; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--A high-water mark in the channel of a previous high stage in the lake was noted on Sept. 3, 1936, as 3.2 ft (0.98 m) gage height, affected by seiche.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 55 ft^3/s (1.56 m^3/s) Jan. 18, gage height, 1.64 ft (0.500 m); minimum, 0.59 ft^3/s (0.017 m^3/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	6.6	13	17	40	35	38	39	41	35	15	2.5
2	2.3	6.4	14	17	41	34	38	39	42	34	15	2.5
3	2.0	6.1	16	18	41	34	37	38	43	33	14	2.5
4	1.8	6.4	17	17	42	35	36	38	43	32	13	2.4
5	1.7	6.6	18	21	41	35	36	38	43	32	13	2.3
6	1.7	6.4	18	21	42	35	39	38	43	31	12	2.2
7	1.6	6.1	18	21	42	35	42	39	43	30	12	1.9
8	1.6	5.7	17	23	41	34	42	38	42	30	11	1.8
9	1.4	5.4	17	23	40	33	43	39	42	29	11	1.7
10	1.2	5.4	19	25	39	33	45	41	41	29	10	1.6
11	1.1	5.2	18	26	39	34	44	41	41	27	9.7	1.4
12	1.0	5.2	18	32	38	35	43	41	41	27	9.4	1.4
13	.96	5.0	18	41	36	37	42	40	41	26	8.8	1.4
14	1.0	4.8	18	47	36	40	41	40	41	26	8.5	1.3
15	1.2	4.4	18	49	35	43	41	40	41	24	7.9	1.2
16	1.1	5.0	17	50	35	43	41	39	41	24	7.4	1.1
17	1.0	5.4	16	51	35	42	40	38	40	23	7.1	1.0
18	1.2	6.6	16	50	35	44	39	38	39	22	6.9	1.3
19	3.2	7.1	16	50	35	43	39	38	39	22	6.4	1.4
20	4.2	6.9	16	47	35	43	40	38	38	22	6.1	1.6
21	4.4	6.6	17	47	35	43	41	37	38	21	5.7	1.7
22	4.4	6.9	18	46	35	42	41	39	37	21	5.4	1.4
23	4.8	7.4	18	45	36	41	41	40	38	20	5.2	1.3
24	5.2	11	18	44	36	41	40	41	37	19	4.6	1.2
25	5.9	13	18	43	35	40	40	42	37	19	4.4	1.2
26	5.9	14	18	42	35	40	39	43	37	18	4.2	1.0
27	5.9	14	18	42	35	41	39	42	38	18	3.8	.91
28	6.1	14	17	42	35	41	39	42	37	18	3.6	.86
29	6.1	13	16	42	36	40	40	41	36	17	3.2	.77
30	6.4	13	16	42	---	39	39	41	35	17	2.9	.67
31	6.9	---	16	40	---	39	---	40	---	16	2.6	---
TOTAL	95.46	229.6	528	1121	1086	1194	1205	1228	1195	762	249.8	45.51
MEAN	3.08	7.65	17.0	36.2	37.4	38.5	40.2	39.6	39.8	24.6	8.06	1.52
MAX	6.9	14	19	51	42	44	45	43	43	35	15	2.5
MIN	.96	4.4	13	17	35	33	36	37	35	16	2.6	.67
AC-FT	189	455	1050	2220	2150	2370	2390	2440	2370	1510	495	90

CAL YR 1979 TOTAL 10213.16 MEAN 28.0 MAX 62 MIN .96 AC-FT 20260
WTR YR 1980 TOTAL 8939.37 MEAN 24.4 MAX 51 MIN .67 AC-FT 17730

14147500 NORTH FORK OF MIDDLE FORK WILLAMETTE RIVER NEAR OAKRIDGE, OR

LOCATION.--Lat 43°45'25", long 122°30'15", in SW¼ sec.7, T.21 S., R.3 E., Lane County, Hydrologic Unit 17090001, on left bank 2.5 mi (4.0 km) northwest of Oakridge and at mile 1.0 (1.6 km).

DRAINAGE AREA.--246 mi² (637 km²), at measuring section 0.5 mi (0.8 km) downstream.

PERIOD OF RECORD.--October 1909 to March 1916, September 1935 to current year. Monthly discharge only for some periods, published in WSP 1318. Prior to October 1912, published as "near Hazeldell."

REVISED RECORDS.--WSP 1248: 1914-16.

GAGE.--Water-stage recorder. Datum of gage is 1,029.6 ft (313.82 m) National Geodetic Vertical Datum of 1929 (river profile survey). Oct. 1, 1909, to March 31, 1916, water-stage recorder or nonrecording gage at several sites within 0.8 mi (1.3 km) of present site at various datums. Sept. 10, 1935, to Oct. 3, 1938, nonrecording gage at present site and datum.

REMARKS.--Records good. Slight regulation by Waldo Lake; occasional fluctuations during low-water periods caused by log-ponds above station. No diversions above station. All records given herein are for measuring site.

AVERAGE DISCHARGE.--51 years (water years 1910-15, 1936-80), 788 ft³/s (22.32 m³/s), 43.50 in/yr (1,105 mm/yr), 570,900 acre-ft/yr (704 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,400 ft³/s (691 m³/s) Dec. 22, 1964, gage height, 19.14 ft (5.834 m), from floodmark, from rating curve extended above 7,100 ft³/s (201 m³/s) on basis of slope-area measurement of peak flow; minimum, 22 ft³/s (0.62 m³/s) Aug. 20, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,500 ft³/s (99.1 m³/s) and maximum discharge, 8,650 ft³/s (245 m³/s) Jan. 13, gage height, 9.88 ft (3.011 m); minimum, 100 ft³/s (2.83 m³/s) Oct. 7-9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	515	545	520	650	792	632	770	540	331	175	131
2	115	408	1380	530	700	733	613	728	613	317	173	135
3	111	349	2130	577	900	707	572	691	754	310	170	144
4	111	471	1970	588	850	770	566	681	728	324	168	135
5	111	722	1960	1740	800	792	604	676	702	307	165	133
6	111	545	1500	1790	950	781	738	656	696	294	165	127
7	111	437	1210	1350	922	738	738	608	770	285	163	129
8	109	376	1030	1170	878	696	878	577	717	279	158	127
9	109	331	906	1080	820	651	1260	647	661	273	158	123
10	108	300	1030	1020	754	618	1360	656	613	276	156	125
11	108	279	868	906	707	671	1250	627	572	264	153	123
12	108	261	787	3660	661	651	1180	577	540	258	151	123
13	108	250	712	7610	627	749	1310	540	556	250	151	133
14	123	234	651	7070	599	1260	1510	510	530	243	149	131
15	133	221	604	4470	561	1150	1450	488	497	243	149	129
16	121	258	551	3050	535	1030	1340	458	466	237	146	123
17	121	313	520	2400	530	939	1380	445	449	230	144	123
18	153	497	497	2000	535	956	1350	429	425	224	151	144
19	608	449	506	1600	556	957	1290	425	404	221	151	151
20	497	400	501	1400	599	889	1420	437	388	218	146	149
21	421	353	604	1300	566	917	1460	454	368	212	140	175
22	282	408	671	1100	593	852	1240	480	361	206	140	149
23	310	642	623	1000	647	809	1110	460	384	203	140	138
24	300	1600	613	900	623	787	1060	460	368	200	135	133
25	545	1620	572	850	623	738	999	480	458	197	135	131
26	441	1190	525	800	681	712	962	530	449	192	138	129
27	361	934	492	750	691	754	977	623	412	189	135	125
28	331	765	466	700	792	754	1020	696	380	178	138	123
29	313	651	445	650	841	691	951	651	361	183	131	125
30	324	613	433	650	---	671	841	604	346	178	133	121
31	696	---	441	650	---	651	---	556	---	178	133	---
TOTAL	7515	16392	25743	53881	20191	24866	32061	17620	15508	7500	4640	3987
MEAN	242	546	830	1738	696	802	1069	568	517	242	150	133
MAX	696	1620	2130	7610	950	1260	1510	770	770	331	175	175
MIN	108	221	433	520	530	618	566	425	346	178	131	121
CFSM	.98	2.22	3.37	7.07	2.83	3.26	4.35	2.31	2.10	.98	.61	.54
IN.	1.14	2.48	3.89	8.15	3.05	3.76	4.85	2.66	2.35	1.13	.70	.60
AC-FT	14910	32510	51060	106900	40050	49320	63590	34950	30760	14880	9200	7910

CAL YR 1979 TOTAL 258920 MEAN 709 MAX 3600 MIN 108 CFSM 2.88 IN 39.15 AC-FT 513600
WTR YR 1980 TOTAL 229904 MEAN 628 MAX 7610 MIN 108 CFSM 2.55 IN 34.77 AC-FT 456000

14148000 MIDDLE FORK WILLAMETTE RIVER BELOW NORTH FORK, NEAR OAKRIDGE, OR

LOCATION.--Lat 43°48'05", long 122°33'35", in SW¼ sec.27, T.20 S., R.2 E., Lane County, Hydrologic Unit 17090001, on left bank 0.5 mi (0.8 km) downstream from Whitehead Creek, 4.2 mi (6.8 km) downstream from North Fork of Middle Fork Willamette River, 7.0 mi (11.3 km) northwest of Oakridge, and at mile 220.2 (354.3 km).

DRAINAGE AREA.--924 mi² (2,393 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1911 to September 1912, July 1923 to current year. Monthly discharge only for some periods, published in WSP 1318. Published as "near Hazeldell" 1911-12 and as "at Eula" 1923-50.

REVISED RECORDS.--WSP 694: 1925-28. WSP 814: Drainage area at Eula. WSP 1248: 1924, 1925(M), 1926-28, 1929(M), 1930, 1933, 1946(M). WSP 1398: 1927(M). WSP 1638: 1936(M).

GAGE.--Water-stage recorder. Datum of gage is 934.76 ft (284.915 m) National Geodetic Vertical Datum of 1929. Mar. 22, 1911, to Sept. 30, 1912, nonrecording gage at site 4.0 mi (6.4 km) upstream, just below North Fork at different datum. July 1, 1923, to Aug, 11, 1935, nonrecording gage and Aug. 12, 1935, to Sept. 30, 1950, water-stage recorder at site 4.0 mi (6.4 km) downstream at different datum.

REMARKS.--Water-discharge records good. Flow regulated since 1961 by Hills Creek Lake (see Station 14145100); slight regulation at times by logponds above station. No diversion above station.

AVERAGE DISCHARGE.--58 years, 2,760 ft³/s (78.16 m³/s), 2,000,000 acre-ft/yr (2.47 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 81,800 ft³/s (2,320 m³/s) Dec. 28, 1945, gage height, 18.8 ft (5.73 m), from floodmark, site and datum then in use, from rating curve extended above 39,000 ft³/s (1,100 m³/s); minimum, 322 ft³/s (9.12 m³/s) Aug. 30, 1961, caused by closing outlet gates at Hills Creek Dam.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1861 and prior to beginning of record, 17.0 ft (5.18 m) in February 1890 at site used 1923-50, from information by local resident, discharge, about 55,000 ft³/s (1,560 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 21,100 ft³/s (598 m³/s) Jan. 13, gage height, 7.45 ft (2.271 m); minimum, 689 ft³/s (19.5 m³/s) July 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1520	2800	3240	2060	3010	1980	1620	3120	2180	1370	1270	1400
2	1400	2600	4310	2240	3060	1890	1370	2460	2500	1350	1550	1410
3	1200	2400	6660	2290	3690	1830	1410	1970	2810	1320	1710	1270
4	1200	2600	6330	2330	3900	1870	1370	1940	2720	1300	1700	1290
5	1270	2600	5790	4990	3660	1930	1450	1970	2620	1300	1700	1310
6	1370	2400	4880	5280	3690	1950	1910	1940	2640	1300	1760	1450
7	1370	2200	4360	4390	3660	1900	1940	1870	2830	1300	1770	1440
8	1370	2110	3920	4220	2930	1820	2170	1770	2640	1190	1770	1440
9	1370	2020	3590	4030	2010	1740	3100	1820	2520	1040	1770	1440
10	1370	1960	3760	3920	1890	1670	3340	1920	2370	1190	1770	1440
11	1370	1890	3660	3710	1810	1770	3010	1910	2200	1140	1740	1440
12	1370	1840	3440	9260	1730	1780	2810	2080	2150	1110	1730	1440
13	1370	1790	3310	18300	1660	1980	2940	2350	2240	1080	1730	1450
14	1400	1760	3240	17900	1600	3440	3270	2420	2200	1030	1710	1450
15	1410	1740	3060	13200	1550	3110	3030	2390	2080	1020	1710	1450
16	1410	1820	2960	10300	1500	2600	2810	2310	1990	985	1710	1450
17	1400	1990	2900	9090	1480	2440	2850	2240	1840	985	1730	1450
18	1450	2440	2850	7390	1510	2490	2830	2130	1820	974	1470	1480
19	2810	2390	2740	6600	1520	2410	2770	1960	1710	951	1450	1480
20	3060	2260	2290	6040	1600	2390	3080	1890	1620	909	1440	1470
21	2880	2150	2200	5640	1580	2300	3540	1860	1610	869	1490	1520
22	2580	2220	2620	5430	1600	2140	3540	1970	1620	829	1740	1480
23	2420	2700	2390	4960	1740	2060	3310	2130	1650	800	1740	1440
24	2330	4650	2500	3710	1690	1960	3340	2130	1670	800	1740	1450
25	2940	4330	2440	3590	1670	1890	3840	2330	1790	781	1740	1440
26	2720	3760	2060	3460	1740	1890	3740	2460	1870	762	1740	1400
27	2560	3490	1990	3290	1770	1940	3740	2600	1820	781	1740	1330
28	2480	3290	1870	3200	1930	1870	3840	2600	1740	819	1740	1140
29	2460	3240	1730	3100	2040	1830	3740	2420	1610	810	1640	1320
30	2400	3220	1700	3060	---	1790	3460	2330	1470	810	1440	1360
31	3000	---	1710	3030	---	1740	---	2200	---	940	1400	---
TOTAL	59260	76660	100500	180010	63220	64400	85170	67490	62530	31845	51340	42330
MEAN	1912	2555	3242	5807	2180	2077	2839	2177	2084	1027	1656	1411
MAX	3060	4650	6660	18300	3900	3440	3840	3120	2830	1370	1770	1520
MIN	1200	1740	1700	2060	1480	1670	1370	1770	1470	762	1270	1140
AC-FT	117500	152100	199300	357000	125400	127700	168900	133900	124000	63160	101800	83960

CAL YR 1979 TOTAL 965992 MEAN 2647 MAX 11100 MIN 503 AC-FT 1916000
WTR YR 1980 TOTAL 884755 MEAN 2417 MAX 18300 MIN 762 AC-FT 1755000

14148000 MIDDLE FORK WILLAMETTE RIVER BELOW NORTH FORK, NEAR OAKRIDGE, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: September 1950 to October 1960, June 1961 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 23.5°C Aug. 3, 1961; minimum, 0.0°C Jan. 20-22, 1962, Feb. 2, 1979, Jan. 28-30, 1980.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 19.5°C July 28; minimum, 0.0°C Jan. 28-30.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	17.0	15.0	---	---	---	---	6.5	6.0	3.5	2.0		
2	17.0	13.5	---	---	---	---	6.0	5.5	6.5	3.5		
3	17.0	14.0	---	---	---	---	6.5	6.0	8.5	6.5		
4	17.0	14.0	---	---	---	---	6.5	6.0	8.5	7.5		
5	---	14.0	---	---	---	---	6.5	5.5	8.5	5.5		
6	---	---	---	---	8.0	---	5.5	4.5	8.0	7.5		
7	---	---	12.0	---	7.5	7.5	4.5	4.0	7.5	6.0		
8	---	---	11.5	10.0	8.0	7.5	4.5	4.0	6.0	4.5		
9	---	---	11.0	10.0	8.0	7.5	5.0	4.5	5.0	3.0		
10	---	---	11.0	9.5	8.0	6.0	4.5	3.5	5.0	3.5		
11	---	---	10.5	9.5	6.0	5.0	4.0	3.5	---	---		
12	---	---	10.5	9.0	6.0	5.0	6.5	4.0	---	---		
13	---	---	10.5	9.0	6.5	5.5	7.0	6.0	---	---		
14	---	---	10.0	8.5	6.5	6.0	7.5	7.0	---	---		
15	---	---	10.5	8.5	6.0	5.5	7.0	6.0	---	---		
16	---	---	11.0	10.5	5.5	4.5	6.5	6.0	---	---		
17	---	---	11.5	10.5	6.5	5.5	6.5	4.0	---	---		
18	---	---	10.5	8.5	7.0	6.5	4.0	2.5	---	---		
19	---	---	---	---	7.0	6.0	3.0	2.0	---	---		
20	---	---	---	---	6.5	6.0	3.5	2.5	---	---		
21	---	---	---	---	6.0	5.0	3.5	2.5	---	---		
22	---	---	---	---	5.0	4.0	4.0	3.0	---	---		
23	---	---	---	---	5.0	4.0	4.0	3.0	---	---		
24	---	---	---	---	5.5	4.5	3.5	3.0	---	---		
25	---	---	---	---	5.5	5.0	3.5	3.0	---	---		
26	---	---	---	---	5.5	4.5	3.0	2.0	---	---		
27	---	---	---	---	4.5	3.5	2.0	.5	---	---		
28	---	---	---	---	4.5	3.0	1.0	.0	---	---		
29	---	---	---	---	5.5	4.5	1.0	.0	---	---		
30	---	---	---	---	6.5	5.0	1.5	.0	---	---		
31	---	---	---	---	6.5	5.5	2.0	1.0	---	---		
MONTH	17.0	13.5	12.0	8.5	8.0	3.0	7.5	.0	8.5	2.0		

14148000 MIDDLE FORK WILLAMETTE RIVER BELOW NORTH FORK, NEAR OAKRIDGE, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1						---	---	---	16.0	12.5	15.5	12.0
2						8.0	---	---	15.0	11.5	14.5	12.5
3						---	---	---	14.5	11.5	16.0	12.0
4						---	---	---	15.0	11.0	16.5	12.0
5						---	---	---	13.5	11.0	17.0	12.5
6						---	---	---	14.0	10.5	16.0	13.0
7						---	---	---	14.5	11.0	16.5	13.5
8						---	---	---	14.5	11.5	16.0	12.0
9						---	---	---	15.0	11.5	16.5	12.5
10						---	---	---	15.0	11.5	16.5	13.5
11						---	---	---	15.0	12.0	16.5	13.0
12						---	---	---	15.0	11.5	14.0	13.0
13						---	---	---	15.0	11.5	14.0	12.5
14						---	---	---	14.5	12.0	16.0	12.5
15						---	---	---	14.5	11.0	16.0	12.5
16						---	---	---	15.0	11.5	16.0	12.5
17						---	---	---	14.0	11.5	16.0	13.0
18						---	---	---	14.0	11.5	14.5	14.0
19						---	---	---	16.0	11.0	16.5	13.5
20						---	---	---	16.5	11.5	15.0	14.0
21						---	---	---	16.0	11.5	16.0	13.5
22						---	---	---	14.5	11.5	16.0	13.0
23						---	---	---	15.0	11.5	17.0	13.5
24						---	---	---	15.0	11.5	16.5	14.0
25						---	---	---	15.0	12.0	16.5	13.5
26						---	---	---	15.0	12.0	16.5	14.0
27						---	---	---	14.5	12.5	15.5	14.0
28						---	19.5	---	15.0	11.5	16.5	13.5
29						---	19.0	13.5	14.0	11.5	16.5	13.0
30						---	19.0	13.0	14.0	11.0	17.0	14.0
31							17.5	14.5	15.5	12.0	---	---
MONTH						8.0	19.5	13.0	16.5	10.5	17.0	12.0

14149000 LOOKOUT POINT LAKE NEAR LOWELL, OR

LOCATION.--Lat 43°54'50", long 122°45'00", in SE¼ sec.13, T.19 S., R.1 W., Lane County, Hydrologic Unit 17090001, in elevator house at right end of spillway section of dam on Middle Fork Willamette River, 1.5 mi (2.4 km) east of Lowell, and at mile 206.9 (332.9 km).

DRAINAGE AREA.--991 mi² (2,567 km²).

PERIOD OF RECORD.--November 1953 to current year. Prior to October 1971, published as Lookout Point Reservoir near Lowell.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Nov. 7, 1953, to Dec. 4, 1954, approximate elevations obtained from reference marks and Dec. 5, 1954, to Feb. 4, 1955, nonrecording gage at same site and datum.

REMARKS.--Reservoir is formed by earthfill dam with concrete gate and spillway section, completed in 1954 by Corps of Engineers. Planned storage began in November 1953. Total capacity is 455,800 acre-ft (562 hm³) at elevation 929 ft (283.2 m), and usable capacity is 349,200 acre-ft (431 hm³) between elevations 819 ft (249.6 m), and 929 ft (283.2 m), top of spillway gates. Reservoir used for flood control, improvement of navigation, power generation, pollution abatement, and othe purposes. Figures given herein represent total contents.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 464,900 acre-ft (573 hm³) Dec. 26, 1964, elevation, 931.09 ft (283.796 m); minimum observed since first filling, 91,450 acre-ft (113 hm³) Dec. 1, 1954, elevation, 811.00 ft (247.193 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 445,700 acre-ft (550 hm³) June 28, elevation, 926.64 ft (282.440 m); minimum, 117,400 acre-ft (145 hm³) Dec. 18, elevation, 824.35 ft (251.262 m).

Capacity table (elevation, in feet, and total contents, in acre-feet)

820	108,600	860	205,500	900	338,900
830	129,500	870	235,500	910	377,400
840	152,500	880	267,800	920	417,800
850	117,700	890	302,300	930	460,200

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	886.73	864.27	840.00	828.27	830.62	852.77	869.70	900.56	915.93	926.15	919.57	919.88
2	885.92	863.00	840.98	828.78	832.38	853.24	869.73	901.21	916.62	926.12	919.54	919.50
3	885.28	862.47	843.18	829.28	834.40	853.73	869.80	901.62	917.43	926.12	919.57	919.68
4	884.54	860.33	844.06	829.57	836.58	854.23	870.10	902.30	918.21	926.17	919.62	917.79
5	883.84	859.42	843.15	832.50	838.55	854.80	870.30	902.93	918.88	926.18	919.92	916.89
6	883.15	858.54	840.50	835.57	840.61	855.33	870.87	903.31	919.60	926.20	920.16	916.05
7	882.44	857.38	837.40	836.73	842.52	855.81	871.32	903.65	920.44	926.18	920.14	915.27
8	881.75	855.98	834.13	837.05	843.88	856.20	872.00	903.88	921.13	926.14	920.15	914.42
9	881.05	854.59	833.25	835.55	844.47	856.52	873.33	904.18	921.74	926.04	920.13	913.62
10	880.35	853.24	832.73	832.21	844.92	856.48	874.77	904.76	922.20	925.93	920.09	912.76
11	879.63	851.86	832.55	828.65	845.31	856.18	876.19	905.04	922.48	925.85	920.00	911.77
12	878.90	850.44	831.83	832.65	845.79	855.70	877.28	905.52	922.90	925.78	920.00	910.95
13	878.26	848.92	830.83	848.95	846.13	855.40	878.43	906.11	923.41	925.70	920.00	910.20
14	877.60	848.46	829.80	862.35	846.42	857.43	880.28	907.18	923.88	925.60	920.00	909.46
15	876.97	846.18	828.70	868.65	846.63	859.18	881.53	908.02	924.27	925.50	920.02	908.54
16	876.14	845.05	827.22	872.34	846.84	860.38	882.50	907.96	924.59	925.38	920.05	907.72
17	875.45	844.08	826.02	873.03	846.95	861.30	883.53	908.49	924.82	925.26	920.09	906.88
18	874.88	843.64	824.58	872.93	847.20	862.30	884.50	908.91	925.08	925.13	920.00	906.13
19	875.05	843.00	824.87	869.42	847.50	863.23	885.41	909.24	925.28	925.00	919.92	905.24
20	874.78	842.16	824.68	865.90	848.21	864.10	886.62	909.58	925.38	924.83	919.84	904.30
21	874.30	840.80	825.12	862.12	848.83	864.83	888.20	909.87	925.54	924.60	919.80	903.55
22	873.63	839.68	826.23	858.18	849.30	865.44	889.64	910.28	925.72	924.22	919.92	902.72
23	872.68	839.05	827.10	854.55	849.78	866.02	890.84	910.70	925.93	923.78	920.00	901.84
24	871.75	840.00	828.00	850.78	850.23	866.47	892.03	911.17	926.13	923.16	920.15	900.97
25	871.23	841.38	828.80	840.86	850.56	866.83	892.98	911.73	926.22	922.70	920.23	900.12
26	870.48	842.11	829.24	846.17	851.18	867.37	894.15	912.40	926.28	922.22	920.22	899.15
27	869.58	842.25	829.11	844.15	851.62	867.88	895.60	913.17	926.35	921.70	920.26	898.22
28	868.58	842.12	828.83	839.90	851.93	868.28	897.00	913.87	926.37	921.22	920.29	897.16
29	867.62	841.55	828.50	835.63	852.16	868.62	898.40	914.50	926.33	920.74	920.27	896.22
30	866.22	840.65	828.17	831.32	---	869.02	899.72	915.07	926.23	920.29	920.17	895.52
31	865.33	---	827.90	830.13	---	869.48	---	915.53	---	919.81	920.00	---
MEAN	876.58	848.75	831.53	845.62	845.22	860.79	882.23	907.83	923.18	924.51	920.00	908.08
MAX	886.73	864.27	844.06	873.03	852.16	869.48	899.72	915.53	926.37	926.20	920.29	919.88
MIN	865.33	839.05	824.58	828.27	830.62	852.77	869.70	900.56	915.93	919.81	919.54	895.52
(†)	221200	154000	124900	129800	183500	233900	337800	399500	444000	417000	417800	322200
(‡)	-70800	-67200	-29100	+4900	+53700	+50400	+103900	+61700	+44500	-27000	+800	-95600

CAL YR 1979 MEAN 886.59 MAX 926.83 MIN 820.50 AC-FT‡ +15300
WTR YR 1980 MEAN 881.29 MAX 926.37 MIN 824.58 AC-FT‡ +30200

† Contents, in acre-feet, at 2400, on last day of month.
‡ Change in contents, in acre-feet.

14150000 MIDDLE FORK WILLAMETTE RIVER NEAR DEXTER, OR

LOCATION.--Lat 43°56'45", long 122°50'10", in SE¼NW¼ sec.5, T.19 S., R.1 W., Lane County, Hydrologic Unit 17090001, on right bank 0.6 mi (1.0 km) upstream from Lost Creek, 2.0 mi (3.2 km) northwest of Dexter, 2.6 mi (4.2 km) downstream from Dexter Dam, and at mile 201.2 (323.7 km).

DRAINAGE AREA.--1,001 mi² (2,593 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1946 to September 1954 (published as "at Lowell"), June 1955 to current year. Monthly discharge only for October 1954 to June 1955, published in WSP 1738.

REVISED RECORDS.--WSP 1638: 1948(P).

GAGE.--Water-stage recorder. Datum of gage is 592.30 ft (180.533 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Aug. 23, 1950, nonrecording gage and Aug. 23, 1950, to Sept. 30, 1954, at site 4.0 mi (6.4 km) upstream at different datum, and June 9, 1955, to Feb. 18, 1977, at datum 3.00 ft (0.914 m) higher.

REMARKS.--Water-discharge records good. Flow regulated since 1953 by Lookout Point Lake (see station 14149000), since 1955 by Dexter Lake (re-regulating), and since 1961 by Hills Creek Lake (see station 14145100).

AVERAGE DISCHARGE.--34 years, 3,154 ft³/s (89.32 m³/s), 2,285,000 acre-ft/yr (2.82 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 62,600 ft³/s (1,770 m³/s) Jan. 18, 1953, gage height, 12.46 ft (3.798 m), site and datum then in use, from rating curve extended above 33,000 ft³/s (935 m³/s); minimum daily, 100 ft³/s (2.83 m³/s) Nov. 25, 1960.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage, 13.9 ft (4.24 m) Dec. 28, 1945, former site and datum.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 12,600 ft³/s (357 m³/s) Jan. 18, gage height, 9.98 ft (3.042 m); minimum, 1,110 ft³/s (31.4 m³/s) Apr. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2420	3990	3920	1660	1730	1250	1230	1190	1260	1470	1680	1910
2	2420	3990	3920	1630	1250	1250	1220	1200	1260	1360	1660	1970
3	2420	3970	3920	1700	1250	1250	1220	1200	1270	1360	1640	2860
4	2430	3960	5140	1930	1250	1250	1210	1190	1290	1320	1640	3070
5	2430	3870	7390	2160	1250	1260	1210	1180	1280	1320	1640	3000
6	2460	3860	8790	2160	1250	1280	1200	1180	1280	1310	1630	2970
7	2460	3830	8430	2870	1250	1290	1210	1190	1280	1310	1630	2970
8	2440	3830	8180	4100	1250	1290	1210	1200	1290	1320	1630	3090
9	2430	3620	4850	5230	1240	1360	1210	1200	1290	1310	1630	2990
10	2410	3450	4240	8320	1240	1790	1200	1190	1280	1250	1630	2970
11	2390	3610	4140	8300	1250	2470	1200	1190	1290	1260	1640	2990
12	2390	3620	3800	5940	1250	2500	1200	1190	1290	1250	1640	3000
13	2390	3620	4070	1400	1250	2340	1190	1190	1300	1230	1640	3010
14	2380	3510	4070	1280	1250	1450	1190	1200	1290	1230	1640	3030
15	2390	3290	4070	2070	1250	1240	1180	1260	1290	1230	1640	3010
16	2390	3170	4070	4780	1250	1240	1170	1270	1290	1230	1640	3010
17	2410	3110	4070	8490	1250	1240	1170	1270	1290	1220	1640	3030
18	2510	3140	4070	9920	1250	1240	1170	1270	1290	1220	1640	3040
19	3040	3230	2910	12100	1250	1230	1160	1260	1280	1210	1650	3000
20	3610	3260	2270	12000	1230	1230	1170	1260	1280	1210	1650	3010
21	3590	3380	1720	11900	1230	1230	1180	1270	1310	1490	1640	3030
22	3590	3650	1650	11700	1230	1230	1140	1280	1330	1700	1640	3030
23	3580	3800	1510	9300	1230	1230	1120	1270	1340	1750	1640	3010
24	3580	3620	1500	9400	1230	1230	1130	1280	1350	1720	1640	3000
25	3560	3480	1510	6000	1220	1230	1150	1280	1370	1720	1640	2990
26	3960	3500	1770	4440	1230	1230	1160	1270	1630	1750	1640	2970
27	3780	3510	2070	8600	1230	1230	1180	1270	1610	1750	1640	2970
28	3780	3940	2150	8790	1230	1220	1190	1270	1610	1750	1640	3000
29	3680	4190	2030	8300	1250	1220	1200	1260	1620	1750	1640	2990
30	3620	4000	1850	5760	---	1230	1190	1260	1620	1750	1650	2990
31	3830	---	1850	2930	---	1230	---	1260	---	1730	1640	---
TOTAL	90770	109000	115930	185160	36520	42960	35560	38250	40460	44480	50880	87910
MEAN	2928	3633	3740	5973	1259	1386	1185	1234	1349	1435	1641	2930
MAX	3960	4190	8790	12100	1730	2500	1230	1280	1630	1750	1680	3090
MIN	2380	3110	1500	1280	1220	1220	1120	1180	1260	1210	1630	1910
AC-FT	180000	216200	229900	367300	72440	85210	70530	75870	80250	88230	100900	174400

CAL YR 1979 TOTAL 978210 MEAN 2680 MAX 8790 MIN 1120 AC-FT 1940000
WTR YR 1980 TOTAL 877880 MEAN 2399 MAX 12100 MIN 1120 AC-FT 1741000

14150000 MIDDLE FORK WILLAMETTE RIVER NEAR DEXTER, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: August 1955 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 18.5°C Sept. 17, 21, 22, 24, 25, 1961; minimum, 3.0°C Jan. 2, 7-9, Feb. 2-4, 1979.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 17.5°C Oct. 2-5, 9-11, 15; minimum, 5.0°C Jan. 28 to Feb. 2, Feb. 12-17.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	17.0	16.0	15.0	14.5	9.0	9.0	7.0	6.5	5.5	5.0	8.0	7.0
2	17.5	16.0	14.5	14.5	9.0	9.0	7.0	6.5	5.5	5.0	8.5	7.0
3	17.5	16.0	14.5	14.0	9.0	9.0	7.0	6.5	6.5	5.5	8.0	7.0
4	17.5	16.0	14.0	14.0	9.0	9.0	7.0	6.5	6.5	5.5	8.5	7.5
5	17.5	16.0	14.5	14.0	9.0	8.5	7.0	6.5	6.0	5.5	8.5	7.0
6	16.5	16.5	14.0	13.5	9.0	8.5	6.5	6.5	6.5	5.5	8.5	7.0
7	16.5	16.5	14.0	13.0	8.5	8.5	6.5	6.5	6.5	5.5	9.0	7.0
8	17.0	16.0	14.0	13.0	8.5	8.5	6.5	6.5	6.5	5.5	8.5	7.0
9	17.5	16.0	13.5	13.0	8.5	8.5	6.5	6.0	6.5	5.5	9.0	7.0
10	17.5	16.0	13.0	12.5	8.5	8.0	6.5	6.0	6.0	5.5	8.5	7.0
11	17.5	16.0	13.0	12.5	8.0	7.5	6.0	6.0	6.0	5.5	8.0	7.0
12	17.0	16.0	12.5	12.5	8.0	7.5	6.5	6.0	6.0	5.0	8.0	7.0
13	17.0	16.0	12.5	12.0	8.0	7.5	7.0	6.5	6.5	5.0	7.5	7.0
14	16.5	16.5	12.0	12.0	8.0	7.5	7.5	7.0	6.0	5.0	7.5	7.0
15	17.5	16.5	12.0	11.5	8.0	7.5	7.0	6.5	6.5	5.0	8.0	7.0
16	17.0	16.5	12.0	11.5	7.5	7.0	7.0	6.5	5.5	5.0	8.5	7.0
17	17.0	16.0	12.0	11.5	7.5	7.0	6.5	6.5	5.5	5.0	8.0	7.0
18	16.0	16.0	12.0	11.5	7.5	7.5	6.5	6.0	6.0	5.5	8.5	7.0
19	16.0	15.5	12.0	11.5	8.0	7.0	6.5	6.0	6.0	5.5	8.5	7.0
20	15.5	15.5	11.5	11.0	8.0	7.0	6.5	6.0	6.5	5.5	8.0	7.0
21	15.5	15.5	11.0	10.5	7.5	7.0	6.5	6.0	6.5	5.5	8.5	7.0
22	15.5	15.5	10.5	10.5	7.5	7.0	6.0	6.0	6.5	6.0	9.0	7.0
23	15.5	15.5	11.0	10.5	7.0	7.0	6.0	6.0	6.5	6.0	8.5	7.0
24	15.5	15.5	10.5	10.5	7.0	7.0	6.0	6.0	7.5	6.0	9.5	7.0
25	16.0	15.0	10.5	10.0	7.0	7.0	6.0	6.0	7.0	6.5	9.5	7.0
26	15.5	15.5	10.0	10.0	7.5	6.5	6.0	5.5	7.5	7.0	9.0	7.0
27	15.5	15.0	10.0	9.5	7.0	6.5	6.0	5.5	7.5	7.0	9.5	7.0
28	15.5	15.0	9.5	9.0	6.5	6.5	5.5	5.0	8.0	7.0	9.5	7.0
29	15.5	14.5	9.0	9.0	7.0	6.5	5.5	5.0	8.5	7.0	9.0	8.0
30	15.0	14.5	9.0	9.0	7.0	6.5	5.0	5.0	---	---	9.5	8.0
31	15.0	14.5	---	---	7.5	6.5	5.0	5.0	---	---	9.0	8.0
MONTH	17.5	14.5	15.0	9.0	9.0	6.5	7.5	5.0	8.5	5.0	9.5	7.0

14150000 MIDDLE FORK WILLAMETTE RIVER NEAR DEXTER, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.0	7.5	12.5	10.0	11.5	10.5	14.0	11.5	15.0	12.5	15.5	14.0
2	10.0	7.5	11.5	10.0	12.0	10.5	14.0	12.0	15.0	12.5	15.0	14.0
3	9.0	7.5	12.5	10.0	12.5	10.5	12.5	12.0	15.0	12.5	15.5	14.0
4	9.0	8.0	12.5	10.0	13.0	10.5	12.5	12.0	15.0	12.5	15.0	14.0
5	10.0	8.0	12.0	10.0	12.0	10.5	13.0	12.0	15.0	13.0	15.0	14.0
6	9.0	8.0	12.0	10.5	12.0	10.5	14.0	11.5	15.0	12.5	15.0	14.0
7	9.0	7.5	12.5	10.0	12.5	10.5	14.5	11.5	15.0	12.0	15.0	14.0
8	9.0	8.5	11.5	10.0	12.5	11.0	14.5	12.0	15.0	12.5	14.5	14.0
9	9.5	8.5	11.5	10.0	13.0	11.0	14.0	12.0	15.5	12.5	14.5	14.0
10	10.5	8.0	10.5	10.0	13.0	11.0	14.5	12.0	15.0	12.5	15.0	14.0
11	11.0	8.0	10.5	10.0	12.0	11.0	14.5	12.0	15.0	12.0	15.0	14.0
12	11.5	8.5	11.0	10.0	12.5	11.0	14.5	12.0	15.0	12.5	14.5	14.0
13	11.5	8.5	10.0	10.0	12.0	11.0	15.0	12.0	14.5	12.5	14.5	14.0
14	11.0	9.0	11.0	10.0	12.0	11.0	14.5	12.0	15.0	12.0	15.0	14.0
15	11.5	9.0	11.5	9.5	13.5	11.0	15.0	12.0	15.0	12.5	15.0	14.0
16	12.0	9.0	12.5	10.0	11.5	10.5	15.0	12.0	15.0	12.5	15.0	14.0
17	11.0	9.5	12.5	10.0	13.5	10.5	15.0	12.0	14.5	12.5	15.0	14.0
18	12.0	9.0	12.5	10.0	13.5	11.0	15.0	12.0	14.0	13.0	15.0	14.0
19	11.5	9.5	12.5	10.0	13.5	11.0	15.0	12.0	15.5	12.5	15.0	14.0
20	10.5	10.0	13.0	10.0	13.0	11.0	15.5	12.0	15.0	12.5	15.0	14.0
21	10.0	9.5	11.5	10.0	13.0	11.0	15.5	12.0	15.0	12.5	15.0	14.0
22	10.5	9.0	11.0	10.0	13.0	11.5	15.0	12.0	15.0	12.5	15.5	14.0
23	11.0	9.0	12.5	10.0	13.0	11.5	15.0	13.0	15.5	13.0	15.5	14.5
24	10.5	9.0	11.5	10.5	13.0	12.0	15.0	12.5	15.0	13.5	15.5	14.5
25	11.5	9.0	11.5	10.0	13.0	12.0	15.0	12.5	15.5	13.0	15.5	14.5
26	12.0	9.0	11.5	10.0	13.5	12.0	15.0	12.5	15.0	13.0	15.5	14.5
27	12.0	9.0	12.5	10.0	14.0	11.5	15.0	12.5	15.0	14.0	15.0	14.5
28	11.0	9.5	12.5	10.0	14.0	11.5	15.0	12.5	15.5	13.5	16.0	14.5
29	11.5	9.0	12.5	10.0	14.0	12.0	15.0	12.5	15.0	13.5	16.0	14.5
30	12.0	9.0	12.5	10.0	14.0	11.5	15.0	12.5	15.5	13.5	16.0	14.5
31	---	---	12.5	10.5	---	---	15.0	12.5	15.5	14.0	---	---
MONTH	12.0	7.5	13.0	9.5	14.0	10.5	15.5	11.5	15.5	12.0	16.0	14.0

14150300 FALL CREEK NEAR LOWELL, OR

LOCATION.--Lat 43°58'15", long 122°38'15", in SW¼ sec.25, T.18 S., R.1 E., Lane County, Hydrologic Unit 17090001, on right bank 0.1 mi (0.2 km) downstream from North Fork, 8.0 mi (12.9 km) northeast of Lowell, and at mile 14.4 (23.2 km).

DRAINAGE AREA.--118 mi^2 (306 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 844.42 ft (257.379 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good. No regulation or diversion above station.

AVERAGE DISCHARGE.--17 years, 412 ft^3/s (11.67 m^3/s), 47.41 in/yr (1,204 mm/yr), 298,500 acre-ft/yr (368 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,100 ft^3/s (343 m^3/s) Jan. 21, 1972, which may have been caused by release from breakup of temporary logjam 12 mi (19 km) upstream, gage height, 11.84 ft (3.609 m); minimum, 16 ft^3/s (0.45 m^3/s) Oct. 3, 4, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,500 ft^3/s (99.1 m^3/s) and maximum discharge, 9,260 ft^3/s (262 m^3/s) Jan. 12, gage height, 10.47 ft (3.191 m); minimum, 21 ft^3/s (0.59 m^3/s) Oct. 11-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	344	380	251	223	355	338	201	215	124	48	31
2	24	226	680	249	237	308	311	190	295	118	47	45
3	23	172	1270	295	497	288	291	180	591	112	45	48
4	22	285	1440	291	489	383	279	172	446	128	45	36
5	22	497	1300	1890	372	409	304	163	379	114	44	33
6	22	318	789	1220	409	413	394	158	348	108	44	31
7	22	226	566	715	463	361	402	151	372	101	43	30
8	23	175	434	621	390	318	601	147	328	95	42	30
9	22	145	358	667	358	279	1100	177	285	94	42	29
10	22	126	450	646	291	257	1150	260	251	95	40	28
11	21	112	355	548	260	406	941	291	223	88	39	28
12	21	101	324	4570	237	406	710	266	209	84	38	29
13	21	94	301	5380	220	636	631	234	231	80	38	38
14	31	86	273	4020	206	1640	586	218	223	77	38	33
15	54	80	249	2450	190	1100	515	201	201	75	37	31
16	34	101	223	1440	180	749	442	185	185	71	37	29
17	29	172	209	1270	175	732	406	167	177	70	37	28
18	120	616	195	941	195	974	341	158	165	67	41	48
19	806	454	209	710	288	866	334	149	151	65	40	44
20	621	341	206	566	344	771	386	140	145	64	37	78
21	386	260	368	467	334	678	497	136	136	62	35	92
22	190	394	538	398	351	562	409	158	132	61	35	50
23	160	601	429	348	471	502	355	160	163	58	34	40
24	138	1000	438	311	394	446	331	177	140	57	33	36
25	348	1100	358	285	341	406	301	338	220	55	33	34
26	229	750	298	263	338	434	279	365	237	55	32	31
27	204	550	260	237	314	484	260	368	190	54	33	30
28	201	440	231	215	406	438	246	321	163	51	34	31
29	190	380	209	200	402	406	243	266	145	50	32	30
30	204	360	201	200	---	386	218	231	134	49	31	28
31	646	---	193	200	---	361	---	201	---	49	31	---
TOTAL	4880	10506	13734	31864	9375	16754	13601	6529	7080	2431	1185	1129
MEAN	157	350	443	1028	323	540	453	211	236	78.4	38.2	37.6
MAX	806	1100	1440	5380	497	1640	1150	368	591	128	48	92
MIN	21	80	193	200	175	257	218	136	132	49	31	28
CFSM	1.33	2.97	3.75	8.71	2.74	4.58	3.84	1.79	2.00	.66	.32	.32
IN.	1.54	3.31	4.33	10.05	2.96	5.28	4.29	2.06	2.23	.77	.37	.36
AC-FT	9680	20840	27240	63200	18600	33230	26980	12950	14040	4820	2350	2240

CAL YR 1979	TOTAL	135506	MEAN 371	MAX 4870	MIN 21	CFSM 3.14	IN 42.72	AC-FT	268800	
WTR YR 1980	TOTAL	119068	MEAN 325	MAX 5380	MIN 21	CFSM 2.75	IN 37.54	AC-FT	236200	

14150300 FALL CREEK NEAR LOWELL, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: August 1963 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum recorded, 25.0°C Aug. 1, 1979; minimum, 0.0°C at times in 1972, 1976-80.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 19.5°C July 28; minimum, 0.0°C Jan. 27, 28.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	14.0	12.0			---	---	7.5	6.5	6.0	5.0	8.0	6.5
2	13.5	11.5			---	---	7.0	6.0	6.0	4.5	9.0	7.5
3	14.0	12.0			8.5	8.5	7.0	7.0	6.5	5.0	8.5	7.5
4	14.0	12.0			8.5	8.0	8.0	7.0	7.0	6.0	8.5	7.5
5	14.0	12.0			8.0	7.0	8.0	6.0	6.0	5.5	8.0	7.0
6	13.5	12.5			7.0	6.5	6.0	5.0	5.5	4.5	8.0	6.5
7	13.5	13.0			7.0	6.0	6.0	4.5	5.5	4.5	8.0	6.5
8	14.5	13.0			7.0	6.5	5.5	4.5	6.0	5.0	---	6.5
9	---	11.5			8.0	6.5	6.0	4.0	---	4.0	---	---
10	---	---			7.5	5.5	4.5	4.0	---	---	---	---
11	---	---			5.5	4.0	6.5	4.0	4.5	4.0	---	---
12	---	---			5.5	4.0	8.0	7.0	4.0	3.5	---	---
13	---	---			5.5	4.0	8.5	8.0	4.5	3.5	---	---
14	---	---			6.0	5.5	8.5	6.5	5.0	4.0	---	---
15	---	---			5.5	4.5	7.5	7.0	5.5	5.0	---	---
16	---	---			5.5	4.5	8.5	7.0	5.5	5.0	---	---
17	---	---			7.5	6.0	7.0	5.0	6.5	5.0	---	---
18	---	---			8.0	7.5	5.0	3.5	7.5	6.5	---	---
19	---	---			8.0	7.5	4.5	4.0	7.5	6.5	---	---
20	---	---			7.5	7.5	5.0	4.0	7.0	6.5	---	---
21	---	---			7.5	6.0	5.0	4.0	6.5	5.0	---	---
22	---	---			6.0	5.0	5.0	4.5	6.0	5.5	---	---
23	---	---			6.0	5.0	5.0	4.5	6.5	5.5	---	---
24	---	---			6.5	6.0	5.5	4.5	8.0	6.5	---	---
25	---	---			6.5	5.5	5.5	4.5	8.0	7.5	---	---
26	---	---			5.5	4.5	4.5	1.5	8.5	8.0	---	---
27	---	---			4.5	4.0	2.0	.0	9.0	8.0	---	---
28	---	---			5.0	3.5	.5	.0	9.0	6.5	---	---
29	---	---			6.0	5.0	2.0	.5	8.0	6.5	---	---
30	---	---			6.5	5.5	3.5	2.0	---	---	---	---
31	---	---			7.0	6.5	5.0	3.5	---	---	---	---
MONTH	14.5	11.5			8.5	3.5	8.5	.0	9.0	3.5	9.0	6.5

14150300 FALL CREEK NEAR LOWELL, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1							---	---	19.0	15.5	---	---
2							---	---	18.0	15.0	---	---
3							---	---	18.5	15.0	15.5	---
4							---	---	18.0	14.5	15.0	12.0
5							---	---	16.5	14.5	15.5	12.5
6							---	---	16.0	12.5	16.0	13.5
7							---	---	17.0	13.0	17.0	14.5
8							---	---	17.5	14.5	15.5	12.5
9							---	---	18.0	14.5	16.5	13.0
10							---	---	18.5	15.0	17.5	14.5
11							---	---	19.0	15.5	17.0	14.0
12							---	---	18.0	15.0	15.0	14.0
13							---	---	17.5	14.5	14.0	12.5
14							---	---	18.0	15.0	13.5	10.5
15							---	---	16.0	14.0	13.5	11.0
16							---	---	17.0	14.0	14.5	10.5
17							---	---	16.0	14.0	14.5	12.0
18							---	---	15.5	14.0	14.0	13.0
19							---	---	16.0	12.5	14.0	13.0
20							---	---	16.5	13.0	13.5	12.5
21							---	---	16.0	12.5	13.0	12.0
22							---	---	16.0	13.0	12.5	10.5
23							19.0	16.5	16.5	13.0	12.5	10.5
24							18.0	15.0	---	---	13.0	10.0
25							18.0	14.5	---	---	13.5	11.0
26							18.5	15.0	---	---	14.0	12.0
27							19.0	15.5	---	---	13.0	12.5
28							19.5	16.5	---	---	14.0	12.0
29							19.0	16.0	---	---	13.5	12.0
30							18.5	15.0	---	---	14.0	12.0
31							19.0	16.0	---	---	---	---
MONTH							19.5	14.5	19.0	12.5	17.5	10.0

14150800 WINBERRY CREEK NEAR LOWELL, OR

LOCATION.--Lat 43°54'50", long 122°41'15", in NE¼SE¼ sec.16, T.19 S., R.1 E., Lane County, Hydrologic Unit 17090001, on right bank 0.9 mi (1.4 km) upstream from Nelson Creek, 4.6 mi (7.4 km) east of Lowell, and at mile 4.4 (7.1 km).

DRAINAGE AREA.--43.9 mi² (113.7 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 863.70 ft (263.256 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Water-discharge records good. No regulation or diversion above station.

AVERAGE DISCHARGE.--17 years, 120 ft³/s (3.398 m³/s), 37.12 in/yr (943 mm/yr), 86,940 acre-ft/yr (107 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,500 ft³/s (127 m³/s) Dec. 22, 1964, gage height, 8.07 ft (2.460 m); minimum, 1.5 ft³/s (0.042 m³/s) Sept. 4, 5, 8-10, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,000 ft³/s (28.3 m³/s) and maximum discharge, 2,590 ft³/s (73.3 m³/s) Jan. 12, gage height, 6.20 ft (1.890 m); minimum, 4.0 ft³/s (0.11 m³/s) Oct. 10-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	84	137	67	50	82	84	67	114	48	11	6.2
2	4.3	57	362	67	49	74	82	59	155	44	9.9	9.9
3	4.3	44	528	73	95	74	73	55	322	42	9.9	12
4	4.1	63	466	76	97	95	70	50	252	46	9.5	7.7
5	4.1	114	466	441	80	104	76	47	193	44	9.5	6.7
6	4.1	77	288	362	79	106	104	45	169	40	9.5	6.2
7	4.2	56	198	230	76	95	104	42	174	38	9.1	6.2
8	4.3	45	132	190	73	85	139	39	150	34	8.7	5.9
9	4.9	37	143	179	70	76	236	49	126	32	8.7	5.7
10	4.7	31	143	177	67	71	252	92	106	30	8.3	5.4
11	4.5	27	116	162	66	132	221	122	90	28	8.0	5.2
12	4.5	24	104	1280	51	139	193	124	85	26	7.7	5.4
13	4.5	22	95	1540	48	179	193	106	99	24	7.7	9.9
14	7.7	20	84	1060	46	393	182	97	97	22	7.7	7.3
15	12	19	74	693	44	326	159	89	85	22	7.3	6.7
16	8.3	23	67	441	41	239	143	76	77	20	7.3	6.2
17	7.3	55	61	433	40	221	137	66	74	20	7.3	5.7
18	11	207	57	329	44	278	122	58	68	19	9.5	10
19	110	162	56	242	66	261	112	51	64	18	8.7	9.9
20	110	112	52	182	73	233	148	47	61	17	7.3	16
21	101	84	95	143	82	198	227	44	56	17	7.0	34
22	47	104	143	118	92	162	193	52	51	15	6.7	15
23	38	167	120	97	110	143	159	57	76	15	6.7	11
24	31	326	108	82	95	124	141	84	67	14	6.4	9.1
25	70	385	92	74	84	110	122	258	68	14	6.4	8.7
26	50	298	77	70	77	112	106	261	76	13	6.4	7.7
27	47	212	67	63	71	118	95	258	70	13	6.7	7.7
28	52	152	61	57	90	106	89	209	60	12	7.0	7.7
29	50	130	56	52	90	101	85	157	55	12	6.4	7.7
30	49	134	52	50	---	95	73	124	50	11	6.2	7.3
31	130	---	51	48	---	95	---	103	---	11	6.2	---
TOTAL	988.2	3271	4551	9078	2046	4627	4120	2988	3190	761	244.7	270.1
MEAN	31.9	109	147	293	70.6	149	137	96.4	106	24.5	7.89	9.00
MAX	130	385	528	1540	110	393	252	261	322	48	11	34
MIN	4.1	19	51	48	40	71	70	39	50	11	6.2	5.2
CFSM	.73	2.48	3.35	6.67	1.61	3.39	3.12	2.20	2.42	.56	.18	.21
IN.	.84	2.77	3.86	7.69	1.73	3.92	3.49	2.53	2.70	.64	.21	.23
AC-FT	1960	6490	9030	18010	4060	9180	8170	5930	6330	1510	485	536

CAL YR 1979 TOTAL 44406.0 MEAN 122 MAX 1400 MIN 4.1 CFSM 2.78 IN 37.63 AC-FT 88080
WTR YR 1980 TOTAL 36135.0 MEAN 98.7 MAX 1540 MIN 4.1 CFSM 2.25 IN 30.62 AC-FT 71670

14150800 WINBERRY CREEK NEAR LOWELL, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: August 1963 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 26.5°C July 3, 1967; minimum, 0.0°C on several days in 1965, 1972, 1974, 1978-80.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 23.0°C July 21; minimum, 0.0°C Jan. 28-31.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	9.5	7.5	7.5	6.5	8.0	6.5	3.0	.5	8.5	6.0
2	---	---	9.5	8.5	8.5	7.5	7.0	6.0	4.5	2.5	10.0	7.5
3	---	---	9.5	8.5	9.0	8.5	7.5	7.0	6.5	4.5	9.0	7.5
4	---	---	9.5	9.0	9.0	8.0	8.5	7.0	5.5	4.5	10.0	7.5
5	---	---	9.5	8.5	8.0	7.0	8.5	7.0	6.5	4.5	9.0	7.5
6	---	---	9.5	8.0	7.5	6.5	7.0	6.0	7.0	6.0	8.5	7.0
7	---	---	9.0	7.5	7.5	6.5	6.0	5.0	5.5	5.0	8.5	6.5
8	---	---	7.5	6.5	7.5	6.0	6.0	5.5	5.0	3.5	8.0	6.5
9	14.0	---	7.0	6.0	8.5	6.5	6.5	5.0	5.5	3.5	8.0	5.5
10	13.0	10.5	6.0	5.0	8.0	5.5	5.0	4.0	5.5	4.0	8.0	5.5
11	13.0	10.0	6.0	4.5	5.5	4.0	5.5	4.0	4.5	3.5	7.0	5.5
12	12.5	10.0	4.5	3.5	5.5	4.0	8.5	6.0	4.0	2.5	6.5	5.0
13	13.0	11.0	4.5	3.5	5.5	4.5	9.0	8.5	4.5	2.5	6.5	6.0
14	13.0	12.0	4.5	3.5	5.5	5.0	9.5	8.0	5.0	3.0	6.5	5.0
15	14.0	12.0	5.5	3.0	6.0	4.5	8.0	7.0	6.0	4.5	6.0	5.0
16	13.5	12.0	8.0	5.5	5.5	4.0	9.0	7.5	5.5	5.0	7.0	5.0
17	13.5	12.0	9.0	7.5	8.0	6.0	8.5	6.0	6.5	5.0	6.5	5.0
18	12.0	11.0	8.0	6.5	8.0	7.5	6.0	4.0	8.0	6.5	7.0	5.5
19	11.0	9.5	7.5	6.5	8.5	7.5	4.5	3.5	8.0	7.0	8.0	6.0
20	10.0	9.0	6.5	5.5	8.5	7.5	5.0	3.5	7.5	6.5	7.0	6.0
21	9.5	8.5	6.0	5.0	7.5	6.5	4.5	4.0	7.0	5.5	6.0	5.0
22	10.5	9.0	8.0	6.0	6.5	5.0	5.0	4.0	7.0	5.5	7.5	6.0
23	11.5	10.0	7.0	6.0	6.5	5.0	5.0	4.0	7.5	5.5	7.5	6.0
24	12.0	10.5	8.0	7.0	6.5	6.0	5.0	4.0	8.5	7.0	7.5	5.0
25	12.5	10.5	7.0	6.0	6.0	5.5	5.5	4.5	8.5	7.0	8.0	5.0
26	11.5	10.5	6.5	6.0	5.5	4.5	4.5	3.0	9.5	8.0	6.5	5.5
27	11.5	10.5	6.0	5.0	4.5	3.5	3.0	.5	9.5	8.5	7.5	5.0
28	10.5	9.0	6.0	5.0	4.5	3.5	.5	.0	9.5	7.5	7.5	4.0
29	9.5	8.5	6.5	5.5	5.5	4.5	.5	.0	8.5	6.0	7.0	5.5
30	9.5	8.5	7.0	6.0	6.5	5.5	.5	.0	---	---	7.0	5.0
31	10.0	9.5	---	---	7.0	6.0	.5	.0	---	---	6.0	4.5
MONTH	14.0	8.5	9.5	3.0	9.0	3.5	9.5	.0	9.5	.5	10.0	4.0

14150800 WINBERRY CREEK NEAR LOWELL, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.5	5.0	12.5	7.5	11.5	9.0	17.0	11.5	20.5	16.0	16.0	12.5
2	7.0	4.0	11.0	9.5	9.0	8.0	16.0	13.0	20.0	15.0	16.0	14.0
3	7.0	4.0	13.5	8.5	9.0	7.5	14.0	12.5	20.5	16.0	15.5	12.0
4	7.5	5.5	14.5	9.5	10.0	7.5	12.5	11.5	19.5	15.0	15.5	11.5
5	8.5	6.5	12.5	10.5	10.5	8.5	13.5	11.5	17.5	15.0	16.5	12.5
6	6.5	4.5	12.5	10.5	9.5	9.0	17.5	11.5	18.0	13.0	16.5	13.5
7	6.0	4.0	13.5	8.5	11.5	8.5	18.0	12.5	19.0	13.5	17.5	15.0
8	7.5	5.5	11.0	9.5	12.5	10.0	17.5	14.0	19.5	15.0	16.0	12.5
9	7.5	6.5	10.5	8.5	12.5	10.0	16.0	14.0	20.0	15.0	17.5	13.5
10	8.0	6.0	8.5	7.5	12.5	10.0	18.0	13.5	20.0	15.5	18.0	15.0
11	9.0	5.0	9.0	8.0	11.0	10.0	18.0	13.0	20.5	16.5	17.0	14.5
12	10.5	6.5	10.0	8.5	11.5	10.0	19.0	14.5	19.5	15.5	16.0	14.5
13	10.5	7.0	9.0	8.5	10.5	9.5	19.0	13.0	19.0	15.5	14.5	12.5
14	9.0	7.5	10.0	8.0	10.0	9.0	19.0	15.0	18.5	15.5	13.5	11.0
15	10.0	7.0	10.0	7.5	14.5	9.5	20.0	14.0	18.0	14.0	14.0	10.5
16	11.0	6.5	11.5	7.0	12.0	11.0	20.5	14.5	18.5	14.5	15.0	11.5
17	10.0	8.0	13.0	8.0	14.5	10.5	20.0	15.0	18.0	14.5	15.0	12.5
18	11.0	7.0	13.0	9.5	15.0	10.0	20.0	14.5	17.0	15.0	14.5	13.5
19	10.5	8.5	14.0	9.5	15.0	10.5	20.5	14.5	17.5	12.5	14.5	13.0
20	9.0	7.5	15.5	10.5	14.0	12.0	21.5	15.5	17.5	13.5	14.0	12.5
21	7.5	7.0	12.5	11.0	14.0	11.0	23.0	16.5	17.0	12.5	13.0	11.5
22	8.5	7.0	11.0	8.5	14.0	12.0	22.0	17.5	17.0	13.0	13.0	10.0
23	10.0	8.0	10.5	8.0	13.0	11.0	21.0	17.0	17.5	13.0	13.0	10.0
24	9.5	8.0	9.0	7.5	13.0	11.0	20.5	15.0	16.0	14.0	13.5	11.0
25	11.0	7.0	8.5	7.5	12.5	11.0	21.0	15.0	17.0	12.5	13.5	11.0
26	12.5	8.0	8.5	7.5	12.5	10.0	21.5	15.5	16.5	13.0	14.0	12.0
27	13.5	9.0	9.5	8.0	14.5	10.0	22.0	16.5	17.0	15.0	13.0	12.5
28	11.5	10.0	11.5	8.5	15.5	11.0	22.5	17.0	16.5	13.5	14.5	12.0
29	10.5	8.5	11.0	8.5	15.0	11.5	21.5	16.5	15.0	12.0	13.5	11.5
30	11.5	6.5	12.0	9.0	15.5	10.5	21.0	15.0	14.5	11.5	14.5	12.0
31	---	---	13.0	9.5	---	---	21.5	17.0	17.0	13.5	---	---
MONTH	13.5	4.0	15.5	7.0	15.5	7.5	23.0	11.5	20.5	11.5	18.0	10.0

14150900 FALL CREEK LAKE NEAR LOWELL, OR

LOCATION.--Lat 43°56'40", long 122°45'20", in SW¼ sec.1, T.19 S., R.1 W., Lane County, Hydrologic Unit 17090001, in regulating tower near the center of Fall Creek Dam on Fall Creek, 2.2 mi (3.5 km) northeast of Lowell, and at mile 7.2 (11.6 km).

DRAINAGE AREA.--184 mi² (477 km²).

PERIOD OF RECORD.--January 1966 to current year. Prior to October 1971, published as Fall Creek Reservoir near Lowell.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by earthfill dam with concrete gate and spillway section, completed in 1965 by Corps of Engineers; storage began January 1966. Total capacity is 125,100 acre-ft (154 hm³) at elevation 834 ft (254.2 m) and usable capacity is 115,500 acre-ft (142 hm³) between elevation 728 ft (221.9 m) and 834 ft (254.2 m). Reservoir used for flood control, conservation, and recreation. Figures given herein represent total contents.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 123,200 acre-ft (152 hm³) May 30, 31, 1972; maximum elevation, 832.98 ft (253.892 m) May 31, 1972; minimum, no contents Nov. 7 to Dec. 6, 1969, Nov. 14-16, 1970, Nov. 18-25, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 120,500 acre-ft (149 hm³) June 26, elevation, 831.50 ft (253.441 m); minimum, 56 acre-ft (69,000 m³) Dec. 1, elevation, 678.86 ft (206.917 m).

CORRECTIONS.--Change in contents, in acre-feet, published in WRD Oreg. 1972, are in error and should not be used.

Capacity table (elevation, in feet, and total contents, in acre-feet)

670.4	0	725	8,340	785	53,120
679	59	735	13,270	795	64,590
685	366	745	19,480	805	77,880
695	1,400	755	26,130	815	97,750
705	2,850	765	33,770	825	109,200
715	5,200	775	42,580	833	123,200

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	804.31	757.09	691.03	729.84	744.24	775.70	811.19	824.73	830.17	831.11	830.50	828.54
2	802.54	755.16	709.93	729.75	744.10	776.54	811.60	824.99	830.34	831.03	830.36	828.56
3	800.89	753.05	723.24	729.80	746.13	777.38	811.98	825.22	830.49	831.03	830.26	828.53
4	799.19	751.24	731.61	729.81	748.11	778.48	812.41	825.43	830.58	831.07	830.13	828.48
5	797.49	750.12	735.22	736.25	749.56	779.66	812.89	825.63	830.80	831.07	830.01	828.43
6	795.76	748.37	734.00	739.21	751.08	780.86	813.60	825.83	830.97	831.10	829.88	828.38
7	794.02	746.23	732.11	739.15	752.74	781.84	814.25	826.01	831.16	831.08	829.84	828.33
8	792.23	742.65	730.53	738.24	754.12	782.69	815.20	826.21	831.26	831.07	829.79	828.27
9	790.42	737.99	730.26	735.02	755.29	783.44	816.73	826.44	831.31	831.03	829.76	828.24
10	788.98	732.74	729.86	729.33	756.29	784.13	817.64	826.87	831.28	831.02	829.73	827.76
11	787.71	727.00	729.98	728.63	757.20	785.27	817.87	827.33	831.23	830.99	829.66	826.61
12	786.41	726.88	729.95	745.30	757.99	786.42	817.75	827.64	831.30	830.96	829.62	825.30
13	785.11	726.84	729.87	766.91	758.69	788.18	817.50	827.89	831.42	830.89	829.57	823.90
14	783.85	726.95	729.64	779.46	759.36	792.24	817.40	828.10	831.37	830.88	829.52	822.50
15	782.59	727.24	729.66	785.55	759.97	795.00	817.69	828.28	831.18	830.87	829.46	821.55
16	781.26	727.34	729.54	787.78	760.49	796.88	818.22	828.41	831.10	830.85	829.43	821.55
17	779.92	727.77	729.47	788.34	761.08	798.61	818.80	828.52	831.08	830.87	829.35	821.54
18	778.81	730.63	729.36	785.66	761.78	800.77	819.31	828.59	831.10	830.88	829.31	821.55
19	778.45	731.55	729.36	782.17	762.78	802.67	819.80	828.67	831.09	830.88	829.27	821.55
20	777.02	731.23	729.35	777.03	763.94	803.72	820.41	828.71	831.10	830.88	829.23	813.34
21	774.99	730.33	729.99	769.93	765.07	804.28	821.11	828.74	831.12	830.88	829.16	811.87
22	772.93	730.03	730.68	762.80	766.31	804.59	821.51	828.84	831.13	830.90	829.11	810.30
23	771.20	730.47	730.64	757.73	767.85	804.99	821.91	828.94	831.23	830.89	829.05	808.68
24	769.36	732.21	730.52	754.84	769.12	805.66	822.40	829.12	831.26	830.88	829.00	807.05
25	768.05	733.51	729.93	753.51	770.23	806.39	822.82	829.67	831.46	830.86	828.94	805.34
26	766.39	730.93	729.58	752.50	771.28	807.18	823.19	830.13	831.46	830.86	828.87	803.57
27	764.58	724.53	729.69	751.39	772.26	808.02	823.53	830.17	831.29	830.83	828.83	801.85
28	762.79	717.16	729.85	750.09	773.49	808.71	823.83	830.10	831.21	830.82	828.77	800.06
29	760.87	707.53	729.89	748.71	774.66	809.41	824.17	830.03	831.20	830.80	828.73	798.25
30	759.03	690.08	729.86	747.25	---	810.03	824.46	830.00	831.17	830.72	828.65	796.32
31	758.57	---	729.82	745.70	---	810.68	---	830.01	---	830.60	828.61	---
MEAN	781.15	732.83	728.21	753.47	759.83	794.53	818.37	827.91	831.10	830.92	829.43	818.21
MAX	804.31	757.09	735.22	788.34	774.66	810.68	824.46	830.17	831.46	831.11	830.50	828.56
MIN	758.57	690.08	691.03	728.63	744.10	775.70	811.19	824.73	830.17	830.60	828.61	796.32
(†)	28730	823	10500	19940	42250	86140	108300	117800	119900	118900	115400	66230
(‡)	-50280	-27910	+9680	+9440	+22310	+43890	+22160	+9500	+2100	-1000	-3500	-49170

CAL YR 1979 MEAN 792.08 MAX 831.22 MIN 690.08 AC-FT‡ +1310
WTR YR 1980 MEAN 792.25 MAX 831.46 MIN 690.08 AC-FT‡ -12780

† Contents, in acre-feet, at 2400, on last day of month.
‡ Change in contents, in acre-feet.

14151000 FALL CREEK BELOW WINBERRY CREEK, NEAR FALL CREEK, OR

LOCATION.--Lat 43°56'40", long 122°46'25", in NW¼SE¼ sec.2, T.19 S., R.1 W., Lane County, Hydrologic Unit 17090001, on left bank 10 ft (3 m) upstream from highway bridge, 1.1 mi (1.8 km) downstream from Fall Creek Dam, 2.3 mi (3.7 km) southeast of town of Fall Creek, and at mile 6.1 (9.8 km).

DRAINAGE AREA.--186 mi^2 (482 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October to December 1911 (published as Big Fall Creek near Fall Creek; gage heights and discharge measurements only), September 1935 to current year.

REVISED RECORDS.--WSP 1094: 1946(M). WSP 1248: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 637.81 ft (194.404 m) National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). Oct. 1 to Dec. 31, 1911, nonrecording gage at site 0.25 mi (0.40 km) downstream at different datum. Sept. 9, 1935, to Aug. 3, 1950, nonrecording gage at present site and datum.

REMARKS.--Water-discharge records good. Flow regulated since 1966 by Fall Creek Lake (see station 14150900). No diversion above station.

AVERAGE DISCHARGE.--45 years, 582 ft^3/s (16.48 m^3/s), 42.49 in/yr (1,079 mm/yr), 421,700 acre-ft/yr (520 hm^3/yr), adjusted for storage since January 1965.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,700 ft^3/s (700 m^3/s) Dec. 11, 1956, gage height, 18.80 ft (5.370 m), from rating curve extended above 9,700 ft^3/s (275 m^3/s); minimum, 1.5 ft^3/s (0.042 m^3/s) Oct. 7, 8, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,000 ft^3/s (113 m^3/s) Jan. 21, 22, gage height, 7.55 ft (2.301 m); minimum, 28 ft^3/s (0.79 m^3/s) Feb. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1030	969	483	336	687	42	79	44	250	202	140	72
2	1020	957	52	348	321	42	99	44	383	202	140	74
3	1070	944	44	390	46	44	98	44	920	156	138	72
4	1080	976	275	408	46	44	66	44	702	131	138	72
5	1070	982	976	901	46	45	45	44	448	131	138	72
6	1060	969	1490	988	48	45	48	44	445	131	92	72
7	1060	957	1300	1100	48	44	72	44	441	131	72	72
8	1050	1320	1010	1170	44	44	101	44	437	131	72	72
9	1040	1540	580	1950	34	44	310	44	437	131	72	69
10	802	1530	717	2440	34	44	819	44	434	131	74	390
11	702	1480	467	865	34	46	1080	44	376	131	72	976
12	697	131	467	1170	34	45	1070	96	259	131	74	1190
13	692	127	434	52	34	49	1070	135	256	131	72	1180
14	692	79	419	77	34	58	859	135	398	110	74	1190
15	687	39	325	552	34	55	487	135	464	99	72	1230
16	682	118	321	932	34	52	202	135	356	79	70	1250
17	677	166	292	1750	35	51	110	135	269	70	72	1240
18	702	340	281	2960	38	52	110	135	230	70	67	1250
19	1180	479	269	2960	41	51	112	135	215	70	70	1240
20	1480	566	275	3550	41	387	114	135	191	70	74	1240
21	1460	562	360	3930	39	589	259	135	176	70	74	1230
22	1170	562	599	3440	42	566	333	135	176	72	74	1230
23	951	765	608	2340	41	426	230	135	176	72	72	1230
24	944	1170	608	1360	41	166	138	138	176	72	72	1220
25	963	1320	608	792	41	59	101	138	176	72	74	1220
26	963	1920	467	667	42	69	98	265	325	72	69	1210
27	976	2390	310	662	41	69	98	637	383	74	72	1210
28	969	2100	269	657	44	55	79	677	272	74	70	1210
29	976	1940	269	652	42	45	70	548	202	74	72	1230
30	969	1900	269	687	---	45	53	437	202	116	72	1250
31	976	---	269	692	---	45	---	336	---	142	72	---
TOTAL	29790	29298	15113	40778	2086	3418	8410	5241	10175	3348	2586	25263
MEAN	961	977	488	1315	71.9	110	280	169	339	108	83.4	842
MAX	1480	2390	1490	3930	687	589	1080	677	920	202	140	1250
MIN	677	39	44	52	34	42	45	44	176	70	67	69
AC-FT	59090	58110	29980	80880	4140	6780	16680	10400	20180	6640	5130	50110
MEAN†	143	508	645	1468	460	824	653	324	374	91.7	26.5	15.8
CFSM†	.77	2.73	3.47	7.89	2.47	4.43	3.51	1.74	2.01	.49	.14	.08
IN.†	.89	3.05	4.00	9.10	2.67	5.11	3.92	2.01	2.25	.57	.16	.09
AC-FT†	8810	30203	30657	90240	26450	50670	38840	19900	22280	5640	1630	940

CAL YR 1979 TOTAL 194326 MEAN 532 MAX 3050 MIN 31 AC-FT 385400 MEAN† 534 CFSM† 2.87 IN.† 38.99 AC-FT† 386530
WTR YR 1980 TOTAL 175506 MEAN 480 MAX 3930 MIN 34 AC-FT 348100 MEAN† 463 CFSM† 2.49 IN.† 33.80 AC-FT† 335320

† Adjusted for change in contents in Fall Creek Lake.

14151000 FALL CREEK BELOW WINBERRY CREEK, NEAR FALL CREEK, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: August 1950 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 26.0°C July 28, 1958; minimum recorded, 0.5°C on several days in 1962 and 1965.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 18.5°C Aug. 19, 21, 23, 25-28; minimum, not determined.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	10.0	10.0	13.5	13.5					---	---	7.5	6.0
2	10.5	10.0	13.5	13.0					---	---	8.0	6.0
3	10.5	10.5	13.5	13.0					---	---	7.5	6.5
4	11.0	10.5	13.5	13.5					5.5	---	7.5	6.0
5	11.5	11.0	13.5	13.0					5.5	4.5	7.5	6.5
6	12.0	11.5	13.0	12.5					5.5	5.0	8.0	6.5
7	13.0	12.0	12.5	12.5					6.0	4.5	7.5	6.0
8	13.5	13.0	13.0	12.5					6.5	4.5	7.5	6.0
9	14.5	13.5	13.0	12.5					5.5	4.5	8.0	6.0
10	15.0	14.5	13.0	12.5					5.5	4.5	7.5	6.0
11	16.0	15.0	12.5	12.0					5.0	4.0	7.5	6.5
12	16.5	16.0	12.0	10.0					5.5	4.0	7.5	6.5
13	17.0	16.5	10.0	9.5					6.0	4.0	8.0	7.0
14	17.5	17.0	9.5	8.5					5.5	4.5	8.0	7.0
15	18.0	17.5	8.5	8.0					6.0	4.5	8.0	7.0
16	18.0	17.5	9.0	8.5					5.5	4.5	9.0	7.5
17	18.0	18.0	9.5	8.5					5.0	4.5	8.0	7.0
18	18.0	18.0	9.5	9.0					6.0	5.0	8.5	7.0
19	18.0	16.5	9.0	8.5					6.0	5.5	8.5	7.0
20	16.5	15.0	9.0	8.5					6.5	5.0	7.5	6.5
21	15.0	14.5	9.0	8.0					6.0	5.0	7.5	7.0
22	15.0	14.5	8.5	7.5					6.5	5.5	7.0	7.0
23	15.0	14.5	8.5	8.5					7.0	5.5	8.0	7.0
24	15.0	14.5	8.5	7.5					7.5	6.0	9.0	7.5
25	15.0	15.0	8.5	8.0					7.0	6.0	9.0	7.5
26	15.0	14.5	8.0	7.5					7.0	6.5	9.0	8.0
27	15.0	14.5	7.5	7.0					6.5	6.0	9.0	8.0
28	15.0	14.5	7.0	6.5					7.5	6.0	10.5	7.5
29	15.0	14.5	6.5	6.5					8.0	6.0	9.0	7.5
30	14.5	14.5	7.0	6.5					---	---	9.5	7.5
31	14.5	13.5	---	---					---	---	9.0	8.0
MONTH	18.0	10.0	13.5	6.5					8.0	4.0	10.5	6.0

14151000 FALL CREEK BELOW WINBERRY CREEK, NEAR FALL CREEK, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.0	7.0	14.5	10.0	12.0	11.5	13.5	13.0	16.0	14.5	9.5	7.5
2	9.5	8.0	12.5	10.0	12.0	10.0	14.0	13.0	15.5	15.0	9.0	8.0
3	8.5	7.5	14.0	10.5	10.5	8.5	13.5	8.5	16.0	15.5	9.5	7.5
4	9.0	7.5	13.5	10.5	10.5	8.5	9.0	8.0	16.0	15.5	10.0	7.5
5	9.5	7.5	13.5	10.5	10.0	9.5	9.0	8.0	16.0	15.5	10.0	7.5
6	8.5	7.0	13.0	10.5	10.0	10.0	9.5	8.0	17.5	16.0	9.5	8.0
7	9.5	7.5	14.0	10.5	10.0	10.0	9.5	8.0	17.0	15.5	10.0	7.5
8	9.0	8.5	12.5	10.5	10.0	10.0	9.0	8.0	17.0	15.5	9.5	7.5
9	8.5	7.0	12.5	10.5	10.5	10.0	9.0	8.0	17.5	15.5	10.0	7.5
10	8.0	7.0	11.5	11.0	10.5	10.0	9.0	8.0	17.5	16.0	8.5	8.0
11	7.5	7.0	11.5	11.0	11.5	10.0	9.5	8.0	17.0	16.0	8.5	8.0
12	8.0	7.5	12.0	11.0	12.0	11.5	9.5	8.0	17.0	16.0	8.5	8.0
13	8.0	7.5	11.5	10.5	12.0	11.5	9.5	8.0	17.0	16.0	8.5	8.0
14	8.0	7.5	11.5	11.0	11.5	10.0	9.5	8.0	17.0	16.5	8.5	8.5
15	9.0	8.0	12.0	10.5	10.5	10.0	10.0	7.5	17.5	16.0	8.5	8.5
16	9.5	8.0	13.0	10.5	11.0	10.0	10.5	7.5	17.5	16.0	8.5	8.5
17	9.0	8.5	13.0	10.5	12.0	11.0	10.5	8.0	17.5	16.5	8.5	8.5
18	9.5	8.5	12.5	11.0	13.0	11.5	10.5	8.0	17.5	16.0	9.0	8.5
19	9.0	8.5	12.0	11.0	13.0	12.5	10.5	8.0	18.5	16.0	9.0	9.0
20	9.0	8.5	12.5	11.0	13.0	12.5	10.5	8.0	18.0	16.0	9.0	9.0
21	9.0	8.0	12.5	11.0	13.0	12.0	11.0	8.0	18.5	16.5	9.0	9.0
22	8.5	8.0	12.0	11.5	13.0	12.5	10.5	7.5	18.0	16.5	9.5	9.0
23	8.5	8.0	12.0	11.0	13.5	12.5	10.5	8.0	18.5	16.5	9.5	9.5
24	9.5	8.0	12.0	11.5	13.0	12.0	10.5	7.5	18.0	16.5	9.5	9.5
25	11.5	8.0	11.5	11.0	13.5	12.5	10.0	8.0	18.5	16.5	10.0	9.5
26	12.0	10.0	12.0	9.0	12.5	10.5	10.5	8.0	18.5	16.5	10.0	10.0
27	12.5	10.5	9.5	9.0	11.0	10.5	10.5	8.0	18.5	17.0	10.0	10.0
28	11.5	10.0	9.5	9.0	13.0	10.5	10.5	8.0	18.5	8.0	10.5	10.0
29	12.5	9.5	10.0	9.0	13.5	12.5	10.5	7.5	9.5	8.0	11.0	10.5
30	13.5	10.0	10.0	9.5	13.5	13.0	15.5	7.5	9.5	7.5	11.5	11.0
31	---	---	11.5	10.0	---	---	15.5	14.5	10.0	8.0	---	---
MONTH	13.5	7.0	14.5	9.0	13.5	8.5	15.5	7.5	18.5	7.5	11.5	7.5

14152000 MIDDLE FORK WILLAMETTE RIVER AT JASPER, OR

LOCATION.--Lat 43°59'55", long 122°54'20", in SW¼SW¼ sec.14, T.18 S., R.2 W., Lane County, Hydrologic Unit 17090001, on right bank 25 ft (8 m) downstream from highway brige at Jasper, 0.1 mi (0.2 km) downstream from Hills Creek, and at mile 195.0 (313.8 km).

DRAINAGE AREA.--1,340 mi² (3,471 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1905 to February 1912, July 1913 to March 1917, October 1952 to current year. Monthly discharge only for some periods, published in WSP 1318.

REVISED RECORDS.--WSP 1288: 1907-8, 1910-12, 1914-16, drainage area.

GAGE.--Water-stage recorder. Datum of gage is 513.45 ft (156.500 m) National Geodetic Vertical Datum of 1929. September 1905 to February 1912 and July 1913 to March 1917, nonrecording gage at approximately same site at datum about 1.5 ft (0.46 m) higher. Oct. 22, 1952, to Sept. 30, 1953, nonrecording gage at site 25 ft (8 m) upstream at same datum.

REMARKS.--Water-discharge records good. Flow regulated since 1953 by Lookout Point Lake (see station 14149000), since 1961 by Hills Creek Lake (see station 14145100), and since 1966 by Fall Creek Lake (see station 14150900).

AVERAGE DISCHARGE.--37 years (water years 1906-11, 1914-16, 1953-80), 4,081 ft³/s (115.6 m³/s), 2,957,000 acre-ft/yr (3.65 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 94,000 ft³/s (2,660 m³/s) Nov. 23, 1909, gage height, 17.4 ft (5.20 m), datum then in use, from graph based on gage readings, from rating curve extended above 42,000 ft³/s (1,190 m³/s); minimum, 366 ft³/s (10.4 m³/s) Dec. 5, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 17,000 ft³/s (481 m³/s) Jan. 20, gage height, 8.69 ft (2.649 m); minimum, 1,350 ft³/s (38.2 m³/s) July 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3780	5690	5430	2660	3640	1710	1630	1450	1640	1820	1920	2120
2	3760	5580	5670	2600	2190	1670	1630	1440	1780	1690	1900	2140
3	3800	5490	6110	2770	1690	1650	1610	1440	2390	1650	1880	3060
4	3820	5540	7240	3030	1670	1710	1580	1420	2310	1600	1880	3310
5	3820	5620	9650	5170	1640	1740	1560	1410	1970	1580	1860	3240
6	3780	5490	11400	4830	1700	1740	1690	1400	1930	1570	1830	3210
7	3820	5400	10500	4870	1730	1710	1780	1400	1930	1540	1780	3230
8	3820	5620	9770	6470	1680	1670	1840	1400	1910	1560	1780	3330
9	3800	5690	6380	7470	1630	1730	2350	1440	1890	1560	1790	3240
10	3610	5470	5940	11700	1600	2130	2990	1480	1880	1500	1790	3450
11	3470	5580	5450	9740	1580	2950	3110	1460	1830	1500	1790	4050
12	3450	4400	5150	11900	1570	3110	2930	1480	1710	1480	1810	4340
13	3450	4200	5360	6670	1550	3260	2830	1520	1750	1470	1810	4360
14	3450	4060	5300	5620	1540	3550	2590	1510	1860	1440	1810	4380
15	3470	3750	5190	5080	1520	2840	2150	1540	1930	1420	1810	4400
16	3450	3710	5150	7000	1510	2410	1790	1570	1830	1400	1810	4400
17	3450	3780	5100	10900	1510	2240	1640	1570	1730	1380	1810	4400
18	3640	4600	5060	13700	1540	2320	1610	1550	1670	1380	1810	4440
19	4850	4730	4200	14800	1750	2150	1580	1540	1640	1370	1810	4380
20	5850	4640	3280	16300	1700	2360	1660	1530	1610	1360	1820	4400
21	5670	4640	2980	16700	1670	2570	2130	1530	1620	1620	1810	4440
22	5340	5020	3330	16000	1720	2450	2070	1560	1640	1850	1810	4400
23	5020	5760	2990	13100	1830	2270	1820	1580	1650	1960	1810	4360
24	5020	6290	2840	10800	1750	1950	1690	1590	1660	1920	1810	4340
25	5080	6400	2770	9740	1690	1740	1610	1640	1690	1920	1810	4320
26	5470	6700	2930	5560	1680	1750	1580	1730	2080	1950	1790	4300
27	5300	6980	3040	6130	1650	1760	1550	2120	2160	1930	1810	4280
28	5340	6930	3110	9060	1750	1690	1540	2090	2070	1930	1810	4300
29	5210	6930	2980	8910	1740	1650	1510	1970	1970	1930	1810	4300
30	5170	6610	2760	8400	---	1640	1490	1820	1970	1970	1820	4340
31	5690	---	2740	5580	---	1630	---	1730	---	2010	1810	---
TOTAL	134650	161300	159800	263260	50420	65750	57540	48910	55700	51260	56400	117260
MEAN	4344	5377	5155	8492	1739	2121	1918	1578	1857	1654	1819	3909
MAX	5850	6980	11400	16700	3640	3550	3110	2120	2390	2010	1920	4440
MIN	3450	3710	2740	2600	1510	1630	1490	1400	1610	1360	1780	2120
AC-FT	267100	319900	317000	522200	100000	130400	114100	97010	110500	101700	111900	232600

CAL YR 1979 TOTAL 1391640 MEAN 3813 MAX 11400 MIN 1490 AC-FT 2760000
WTR YR 1980 TOTAL 1222250 MEAN 3339 MAX 16700 MIN 1360 AC-FT 2424000

14152000 MIDDLE FORK WILLAMETTE RIVER AT JASPER, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1953 to December 1962, October 1963 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 21.0°C June 1, 2, 1978; minimum, 1.5°C Jan. 25-27, 1969.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 17.5°C Oct. 11; minimum, 4.5°C Feb. 12.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	15.0	12.5	14.0	13.5	7.0	7.0	7.0	6.5	5.0	5.0	7.0	6.5
2	15.0	12.5	13.5	13.5	8.0	7.0	7.0	6.0	5.0	5.0	8.5	6.5
3	15.5	13.0	13.5	13.5	8.5	8.0	6.5	6.5	6.0	5.0	8.0	7.0
4	15.5	13.0	13.5	13.5	8.5	8.5	6.5	6.5	5.5	5.0	8.5	7.0
5	15.5	13.0	13.5	13.5	8.5	8.0	7.0	6.5	5.0	5.0	8.0	7.0
6	14.5	14.0	13.5	13.0	8.0	8.0	6.5	6.0	6.0	5.0	8.0	7.0
7	15.0	14.0	13.0	13.0	8.0	8.0	6.0	5.5	6.0	5.0	8.5	7.0
8	15.0	14.5	13.0	12.0	8.0	7.5	6.5	6.0	5.5	5.0	8.0	7.0
9	16.5	15.0	12.0	12.0	8.0	7.5	6.5	6.0	6.0	5.0	7.0	6.5
10	17.0	14.5	12.0	12.0	8.0	7.0	6.0	5.5	5.5	5.0	6.5	6.5
11	17.5	15.0	12.0	11.5	7.0	6.5	6.0	5.5	5.5	5.0	6.5	6.5
12	17.0	15.0	11.5	11.5	7.0	6.5	7.0	6.0	5.0	4.5	6.5	6.5
13	16.0	15.5	11.5	11.0	7.5	6.5	8.5	8.0	5.5	5.0	6.5	6.5
14	16.0	15.5	11.0	11.0	7.5	7.0	8.5	8.0	5.5	5.0	6.5	6.0
15	16.0	15.5	11.0	11.0	7.5	6.5	8.0	7.0	5.5	5.0	6.0	5.5
16	16.0	16.0	11.0	11.0	7.0	6.5	7.0	7.0	5.5	5.5	6.5	5.5
17	16.0	15.5	11.0	10.5	7.5	7.0	7.0	7.0	5.5	5.5	6.5	6.0
18	16.0	16.0	10.5	9.5	7.5	7.0	7.0	7.0	6.0	5.5	6.5	6.0
19	16.0	15.0	9.5	9.5	7.5	7.0	7.0	6.5	6.0	6.0	6.5	6.0
20	15.0	14.5	9.5	9.0	8.0	7.0	6.5	6.5	6.0	6.0	6.5	6.0
21	14.5	14.5	9.0	9.0	7.5	6.5	6.5	6.5	6.0	6.0	6.5	6.0
22	14.5	14.5	9.0	9.0	7.0	6.0	6.5	6.0	6.0	6.0	6.5	6.0
23	14.5	14.5	9.0	9.0	6.5	6.0	6.5	6.0	6.0	6.0	7.0	6.0
24	14.5	14.5	9.0	9.0	7.0	6.5	6.0	6.0	7.0	6.0	8.0	6.0
25	14.5	14.5	9.0	8.5	7.0	6.0	6.0	6.0	7.0	7.0	8.0	6.0
26	14.5	14.5	8.5	8.0	6.5	5.5	6.0	5.5	7.0	7.0	7.0	6.5
27	14.5	14.5	8.0	8.0	6.0	5.5	5.5	5.0	7.0	7.0	8.0	6.5
28	14.5	14.5	8.0	7.0	6.0	5.5	5.0	5.0	8.0	7.0	8.0	6.0
29	14.5	14.5	7.0	7.0	6.5	5.5	5.0	5.0	7.0	6.5	7.0	6.5
30	14.5	14.5	7.0	7.0	6.5	5.5	5.0	5.0	---	---	8.0	6.5
31	14.5	14.0	---	---	7.0	6.0	5.0	5.0	---	---	7.0	6.5
MONTH	17.5	12.5	14.0	7.0	8.5	5.5	8.5	5.0	8.0	4.5	8.5	5.5

14152000 MIDDLE FORK WILLAMETTE RIVER AT JASPER, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.0	6.0			---	---	16.0	11.0	15.5	13.0	16.0	14.5
2	8.5	6.0			---	---	15.0	11.5	15.5	13.0	15.5	15.0
3	7.0	6.0			---	---	12.5	11.0	15.5	13.0	16.0	13.5
4	8.5	7.0			---	---	12.0	10.5	15.5	13.0	16.0	13.5
5	10.0	7.5			---	---	13.5	11.5	15.0	13.5	15.5	13.5
6	8.0	7.0			---	---	15.5	11.0	15.5	13.5	15.5	13.5
7	8.0	6.0			---	---	16.0	11.5	15.5	13.5	16.0	13.0
8	9.0	7.5			---	---	14.5	13.0	15.5	14.0	15.5	13.5
9	9.5	7.5			15.0	11.5	14.5	13.0	16.0	13.5	16.0	14.0
10	10.0	7.0			15.0	12.0	16.0	13.0	15.5	13.5	15.5	12.0
11	10.0	6.5			13.5	12.0	15.5	11.5	15.5	13.5	13.5	11.5
12	10.5	7.0			15.0	12.0	15.0	11.5	15.5	13.5	12.5	11.5
13	10.5	7.5			13.0	13.0	15.0	11.0	15.0	13.5	12.0	11.0
14	9.5	8.0			12.0	11.5	15.5	12.0	15.5	13.5	13.5	11.0
15	12.0	7.5			15.5	11.0	15.5	11.5	16.0	14.0	13.5	11.0
16	---	---			13.5	11.5	15.5	11.5	16.0	14.5	13.5	11.5
17	---	---			15.5	11.5	15.5	12.0	15.5	14.0	13.0	12.0
18	---	---			16.0	12.0	15.5	12.0	15.0	14.5	12.5	12.0
19	---	---			16.0	12.0	16.0	12.0	16.0	14.0	13.0	12.0
20	---	---			15.0	13.0	16.5	13.0	16.0	14.0	13.0	12.0
21	---	---			15.0	11.5	16.0	13.0	16.0	14.0	13.5	11.5
22	---	---			14.5	13.0	15.5	13.0	16.0	14.5	14.0	12.0
23	---	---			14.5	13.0	15.5	13.5	16.0	14.5	14.0	12.0
24	---	---			14.5	13.0	15.5	13.0	16.0	14.5	14.0	12.0
25	---	---			14.0	12.0	15.5	13.0	16.0	14.5	13.5	12.0
26	---	---			13.5	11.5	15.5	13.0	16.0	14.5	13.5	13.0
27	---	---			15.0	10.5	15.5	13.0	16.0	15.0	13.0	13.0
28	---	---			15.0	10.5	15.5	13.0	16.0	14.5	13.5	13.0
29	---	---			15.0	11.0	15.0	13.0	15.5	14.5	14.0	13.0
30	---	---			15.5	10.5	15.0	13.0	15.0	14.5	14.0	13.5
31	---	---			---	---	15.5	13.5	16.0	14.5	---	---
MONTH	12.0	6.0			16.0	10.5	16.5	10.5	16.0	13.0	16.0	11.0

14152500 COAST FORK WILLAMETTE RIVER AT LONDON, OR

LOCATION.--Lat 43°38'30", long 123°05'05", in SW¼ sec.20, T.22 S., R.3 W., Lane County, Hydrologic Unit 17090002, on left bank 0.6 mi (1.0 km) north of London, 11.0 mi (17.7 km) south of Cottage Grove, and at mile 35.9 (57.8 km).

DRAINAGE AREA.--72.1 mi^2 (186.7 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1935 to current year.

REVISED RECORDS.--WSP 1738: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 852.58 ft (259.866 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Sept. 18 to Oct. 17, 1935, nonrecording gage at same site and datum.

REMARKS.--Water-discharge records good. No regulation. Diversions for irrigation above station.

AVERAGE DISCHARGE.--45 years, 201 ft^3/s (5.692 m^3/s), 37.86 in/yr (962 mm/yr), 145,600 acre-ft/yr (180 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,500 ft^3/s (354 m^3/s) Dec. 22, 1964, gage height, 13.37 ft (4.075 m), from rating curve extended above 3,200 ft^3/s (90.6 m^3/s), on basis of slope-area measurement of peak flow; minimum, 6.8 ft^3/s (0.19 m^3/s) Aug. 18, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,100 ft^3/s (59.5 m^3/s) and maximum discharge, 2,300 ft^3/s (65.1 m^3/s) Jan. 13, gage height, 6.01 ft (1.832 m); minimum, 11 ft^3/s (0.31 m^3/s) Sept. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	135	149	180	116	234	152	109	98	48	20	14
2	15	100	645	175	118	197	138	104	102	46	20	16
3	15	79	866	192	183	178	128	98	128	45	20	20
4	14	116	695	192	175	172	126	91	145	49	19	17
5	14	244	626	597	152	167	162	87	138	47	19	16
6	14	167	411	498	175	197	267	82	124	44	19	14
7	15	120	304	344	175	175	344	79	116	40	18	13
8	16	91	234	296	162	162	390	78	102	39	18	14
9	15	74	192	304	147	147	587	107	91	38	18	13
10	14	64	215	359	133	140	546	152	84	38	17	12
11	14	56	180	333	122	192	402	167	78	36	17	12
12	14	50	159	1350	114	197	322	152	74	34	17	13
13	14	46	142	2110	107	436	281	133	87	33	18	17
14	22	44	128	1830	102	1550	260	126	86	33	17	16
15	28	40	116	1210	96	802	231	114	78	32	17	14
16	19	53	106	753	91	537	197	102	73	30	17	13
17	17	92	98	623	92	475	178	92	70	29	16	12
18	21	319	92	489	120	537	162	86	66	28	17	15
19	189	344	111	390	167	444	149	81	61	28	17	17
20	186	209	109	322	157	406	203	74	59	28	17	21
21	140	152	271	271	149	378	423	71	56	27	16	23
22	73	254	329	234	264	326	340	81	54	26	15	17
23	59	466	285	203	359	289	267	86	69	26	15	15
24	53	623	285	186	264	254	237	89	63	25	15	15
25	221	498	227	170	218	227	203	197	69	24	16	15
26	147	386	180	157	194	212	178	189	67	24	15	14
27	120	304	154	145	186	192	159	164	60	23	16	14
28	120	229	138	131	285	172	145	140	56	22	15	14
29	106	192	124	120	271	159	131	120	54	21	15	13
30	107	170	135	110	---	149	118	104	50	20	15	13
31	164	---	154	109	---	154	---	94	---	21	15	---
TOTAL	1981	5717	7860	14383	4894	9857	7426	3449	2458	1004	526	452
MEAN	63.9	191	254	464	169	318	248	111	81.9	32.4	17.0	15.1
MAX	221	623	866	2110	359	1550	587	197	145	49	20	23
MIN	14	40	92	109	91	140	118	71	50	20	15	12
CFSM	.89	2.65	3.52	6.44	2.34	4.41	3.44	1.54	1.14	.45	.24	.21
IN.	1.02	2.95	4.06	7.42	2.53	5.09	3.83	1.78	1.27	.52	.27	.23
AC-FT	3930	11340	15590	28530	9710	19550	14730	6840	4880	1990	1040	897

CAL YR 1979 TOTAL 64481 MEAN 177 MAX 1930 MIN 13 CFSM 2.46 IN 33.27 AC-FT 127900
WTR YR 1980 TOTAL 60007 MEAN 164 MAX 2110 MIN 12 CFSM 2.28 IN 30.96 AC-FT 119000

14152500 COAST FORK WILLAMETTE RIVER AT LONDON, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: July 1960 to September 1965, June 1967 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 25.5°C July 7, 1968, Aug. 11, 1971; minimum, 0.0°C Jan. 9, 1974, and several days each winter 1976 through 1980.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 23.0°C July 21; minimum, 0.0°C Jan. 28-31.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	16.0	12.0	10.0	9.0	---	---	8.5	6.5	5.5	3.5	9.0	6.0
2	15.5	11.0	10.0	8.5	---	---	7.5	6.0	6.5	5.0	9.5	7.0
3	16.5	12.0	10.0	9.0	---	---	7.5	6.5	7.5	6.0	9.5	7.5
4	16.5	12.5	10.0	9.5	---	---	9.0	6.0	6.0	4.5	10.0	7.5
5	16.5	12.5	10.5	9.0	---	---	9.0	6.5	6.5	5.0	9.5	6.0
6	15.0	13.0	10.0	9.0	---	---	8.0	5.5	7.0	6.0	8.5	6.5
7	14.5	13.5	10.0	8.0	---	---	6.0	5.5	6.0	4.0	9.5	6.0
8	15.0	12.5	8.5	7.0	---	---	6.5	5.5	6.5	5.0	9.0	5.5
9	15.5	12.0	9.0	7.0	---	---	7.5	5.5	6.5	4.5	8.5	5.5
10	15.0	11.0	---	7.0	8.0	5.5	5.5	4.5	6.0	5.0	8.5	5.5
11	15.0	11.0	---	---	5.5	4.0	7.0	4.0	6.5	4.5	8.0	6.0
12	14.5	11.5	---	---	6.0	4.5	8.5	7.0	5.0	3.5	7.0	5.5
13	14.5	12.0	---	---	6.0	4.5	9.0	8.0	5.5	3.5	7.5	6.0
14	14.0	13.0	---	---	6.5	5.0	8.5	7.5	6.0	4.0	9.0	6.0
15	15.0	12.5	---	---	6.0	5.0	8.5	6.0	7.0	5.0	7.0	5.5
16	14.5	12.0	---	---	6.0	4.0	8.5	7.0	6.0	5.0	7.5	5.5
17	13.5	12.0	---	---	9.0	5.5	9.0	6.0	7.0	5.0	8.0	5.5
18	12.5	10.5	---	---	8.5	8.0	6.0	5.0	8.0	6.5	8.5	6.0
19	11.0	10.0	---	---	9.0	7.0	5.0	4.0	8.0	6.0	8.5	6.0
20	10.0	9.0	---	---	9.0	7.0	5.0	4.0	8.5	6.0	8.5	5.5
21	9.5	8.0	---	---	8.0	6.5	5.0	4.0	7.5	5.5	8.0	5.5
22	10.5	9.5	---	---	6.5	5.5	5.5	4.0	7.0	5.5	8.5	5.5
23	12.0	10.0	---	---	7.0	5.5	5.5	4.0	8.0	5.5	8.0	6.0
24	12.5	11.5	---	---	7.5	5.5	5.5	4.0	9.5	6.0	8.5	5.5
25	12.5	11.0	---	---	6.5	5.5	5.5	4.5	9.0	6.5	8.5	5.5
26	11.5	10.0	---	---	6.0	5.0	4.5	3.5	10.0	8.0	8.5	6.0
27	11.5	10.5	---	---	5.0	4.0	3.5	1.5	9.5	8.5	8.5	5.5
28	10.5	9.0	---	---	5.5	4.0	1.5	.0	9.0	7.5	8.5	4.5
29	9.5	8.0	---	---	6.0	5.0	.0	.0	8.5	6.0	8.0	5.5
30	10.0	8.0	---	---	7.5	5.5	.5	.0	---	---	8.5	5.5
31	10.0	9.5	---	---	8.5	5.5	3.5	.0	---	---	6.5	5.0
MONTH	16.5	8.0	10.5	7.0	9.0	4.0	9.0	.0	10.0	3.5	10.0	4.5

14152500 COAST FORK WILLAMETTE RIVER AT LONDON, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.0	5.5	13.0	8.0	12.5	10.5	18.0	12.0			---	---
2	8.0	4.5	11.5	10.0	10.5	9.0	16.5	13.5			---	---
3	8.0	5.0	13.5	8.5	11.0	8.5	14.5	13.0			---	---
4	8.5	6.0	14.5	10.5	11.5	8.0	14.5	12.0			---	---
5	8.5	6.5	13.5	11.0	11.0	9.0	14.5	12.0			---	---
6	7.0	5.5	12.5	10.5	10.5	9.0	17.0	12.0			---	---
7	7.5	5.0	13.5	9.0	12.5	9.0	19.0	12.5			---	---
8	9.0	5.5	11.5	10.0	14.0	10.5	17.5	14.0			---	---
9	9.5	6.5	10.5	9.0	13.5	11.5	15.5	14.0			---	---
10	9.0	5.5	9.0	7.5	14.5	11.0	18.5	13.5			---	---
11	10.5	5.5	9.5	8.0	12.5	11.0	18.5	13.0			---	---
12	11.5	6.0	10.0	8.5	12.5	10.5	19.5	14.5			---	---
13	12.0	8.0	10.0	9.0	11.5	10.0	19.0	13.0			---	---
14	10.5	8.5	10.0	8.0	12.0	10.0	19.0	15.0			---	---
15	11.5	7.0	11.0	8.0	15.0	10.5	20.0	14.0			15.5	11.0
16	12.5	7.5	12.5	7.5	13.5	11.5	20.5	14.0			16.5	11.0
17	11.0	8.5	13.0	8.0	15.5	10.5	20.0	15.0			16.5	11.5
18	12.5	8.0	13.0	10.0	15.5	10.5	20.0	14.5			16.0	13.5
19	12.0	9.5	14.5	10.0	16.0	11.0	20.0	14.5			15.0	13.0
20	11.0	8.5	15.5	10.5	15.0	13.0	21.5	15.5			15.0	13.5
21	9.5	7.5	13.0	11.5	16.0	12.0	23.0	16.0			14.0	12.0
22	9.0	7.5	11.5	9.5	15.5	12.5	22.0	16.5			14.0	10.5
23	12.0	8.5	10.5	8.0	14.0	12.0	21.0	16.5			15.0	10.0
24	11.0	8.5	10.0	8.5	14.0	11.5	20.0	15.0			14.5	11.0
25	11.5	6.5	9.5	7.5	13.5	12.0	20.0	14.5			15.5	10.5
26	13.0	8.0	9.5	7.5	14.5	11.0	21.0	15.0			15.5	12.0
27	14.0	9.0	11.0	8.5	15.5	10.5	22.0	15.5			14.5	12.5
28	12.5	10.5	13.0	9.5	16.5	12.0	22.0	16.0			16.0	12.0
29	11.0	9.0	12.5	9.0	16.0	12.5	21.0	15.5			16.0	11.5
30	12.0	7.5	13.5	10.0	16.5	11.0	20.5	14.5			16.5	13.0
31	---	---	15.0	10.5	---	---	---	17.0			---	---
MONTH	14.0	4.5	15.5	7.5	16.5	8.0	23.0	12.0			16.5	10.0

14153000 COTTAGE GROVE LAKE NEAR COTTAGE GROVE, OR

LOCATION.--Lat 43°43'00", long 123°02'55", in NE¼ sec.28, T.21 S., R.3 W., Lane County, Hydrologic Unit 17090002, in east abutment of dam on Coast Fork Willamette River 5.8 mi (9.3 km) south of Cottage Grove, and at mile 29.7 (47.8 km).

DRAINAGE AREA.--104 mi² (269 km²).

PERIOD OF RECORD.--October 1942 to current year. Prior to October 1971, published as Cottage Grove Reservoir near Cottage Grove.

REVISED RECORDS.--WSP 1218: 1950.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by earthfill dam with concrete spillway completed by Corps of Engineers in 1942; storage began Oct. 31, 1942. Capacity, 32,930 acre-ft (40.6 hm³) between elevation 719.0 ft (219.15 m), outlet conduit, and 791.0 ft (241.10 m), crest of spillway. Dead storage negligible. Reservoir used for flood control and improvement of navigation. Figures given herein represent total contents.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 36,750 acre-ft (45.3 hm³) Dec. 24, 1964, elevation, 794.23 ft (242.081 m); minimum since first filling, no contents Sept. 26 to Oct. 19, 1966, and Nov. 14, 15, Nov. 20 to Dec. 8, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 32,250 acre-ft (39.8 hm³) June 15-17, elevation, 790.41 ft (240.917 m); minimum, 2,620 acre-ft (3.23 hm³) Nov. 3, elevation, 748.14 ft (228.033 m).

Capacity table (elevation, in feet, and total contents, in acre-feet)

710.9	0	755	4,860	780	21,460
730	151	760	7,150	785	26,370
740	926	765	9,970	790	31,780
745	1,840	770	13,260	793	35,270
750	3,140	775	17,070		

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	773.46	748.70	750.87	750.98	752.42	767.89	778.35	785.60	789.24	790.15	789.13	786.70
2	773.00	748.21	753.85	750.95	752.39	767.91	778.65	785.69	789.33	790.14	789.06	786.30
3	772.53	748.20	756.05	750.97	753.22	768.09	778.93	785.79	789.46	790.14	788.98	785.70
4	772.07	748.80	757.07	751.06	753.97	768.48	779.21	785.85	789.62	790.15	788.92	785.10
5	771.60	749.59	756.74	752.76	754.59	768.84	779.60	785.91	789.76	790.15	788.84	784.40
6	771.14	749.51	755.57	752.67	755.35	769.31	780.27	785.85	789.89	790.15	788.77	783.80
7	770.67	749.61	754.88	751.04	756.06	769.72	780.96	785.95	790.02	790.15	788.71	783.20
8	770.20	749.48	753.72	751.01	756.66	770.10	780.46	785.85	790.09	790.13	788.62	782.50
9	769.47	749.16	752.25	751.72	757.14	770.41	782.15	786.05	790.15	790.16	788.56	781.90
10	768.92	749.09	750.82	752.18	757.55	770.70	782.35	786.05	790.19	790.15	788.49	781.20
11	768.31	749.16	750.24	751.01	756.90	771.16	782.09	786.58	790.22	790.12	788.42	780.50
12	767.68	749.17	750.33	759.20	758.19	771.64	781.59	786.45	790.29	790.09	788.34	779.90
13	767.08	749.16	750.19	768.96	758.44	772.83	780.99	786.94	790.37	790.07	788.27	779.20
14	766.51	749.14	750.04	775.64	758.66	776.20	780.73	787.09	790.40	790.03	788.21	778.60
15	765.94	749.16	750.08	776.95	758.86	774.90	781.03	787.21	790.41	789.99	788.12	777.95
16	765.32	749.33	750.04	774.63	759.02	773.39	781.39	787.29	790.41	789.95	788.05	777.50
17	764.68	749.88	750.07	771.80	759.22	772.93	781.76	787.37	790.38	789.90	787.97	777.16
18	764.03	751.48	750.22	769.47	759.60	773.62	782.03	787.35	790.33	789.86	787.91	776.83
19	763.81	752.19	750.49	768.18	760.27	773.97	782.29	787.47	790.31	789.81	787.82	776.49
20	763.38	751.70	750.76	766.51	760.85	774.17	782.75	787.49	790.30	789.76	787.71	776.19
21	762.70	751.33	751.06	764.54	761.36	774.33	783.72	787.53	790.27	789.70	787.63	775.87
22	761.73	752.36	750.69	762.32	762.38	774.37	783.94	787.59	790.26	789.65	787.54	775.53
23	760.70	752.92	750.29	759.87	763.78	774.38	784.02	787.66	790.25	789.59	787.44	775.18
24	759.62	753.20	750.10	758.29	764.72	774.73	784.21	787.80	790.26	789.50	787.36	774.84
25	758.71	753.21	749.96	757.54	765.44	775.29	784.46	788.08	790.28	789.50	787.28	774.50
26	757.31	752.27	749.83	756.82	766.00	775.89	784.74	788.39	790.28	789.50	787.21	774.14
27	755.91	750.45	749.85	755.99	766.54	776.41	784.95	788.63	790.27	789.40	787.11	773.79
28	754.53	750.12	749.65	755.23	767.32	776.85	785.17	788.82	790.23	789.38	787.03	773.45
29	752.97	750.67	749.52	754.53	767.75	777.26	785.34	788.94	790.19	789.32	786.92	773.10
30	751.38	750.89	750.16	753.82	---	777.61	785.45	789.04	790.16	789.24	786.85	772.71
31	749.98	---	750.69	753.10	---	778.01	---	789.12	---	789.20	786.80	---
MEAN	764.37	750.27	751.49	759.02	759.47	772.95	782.12	787.14	790.12	789.84	788.00	778.81
MAX	773.46	753.21	757.07	776.95	767.75	778.01	785.45	789.12	790.41	790.16	789.13	786.70
MIN	749.98	748.20	749.52	750.95	752.39	767.89	778.35	785.60	789.24	789.20	786.80	772.71
(†)	3130	3410	3350	4150	11720	19650	26840	30790	31970	30880	28260	15250
(‡)	-13080	+280	-60	+800	+7570	+7930	+7190	+3950	+1180	-1090	-2620	-13010

CAL YR 1979 MEAN 772.52 MAX 790.50 MIN 748.05 AC-FT‡ +620
WTR YR 1980 MEAN 772.85 MAX 790.41 MIN 748.20 AC-FT‡ -960

† Contents, in acre-feet, at 2400, on last day of month.
‡ Change in contents, in acre-feet.

14153500 COAST FORK WILLAMETTE RIVER BELOW COTTAGE GROVE DAM, OR

LOCATION.--Lat 43°43'15", long 123°02'55", in NE¼ sec.28, T.21 S., R.3 W., Lane County, Hydrologic Unit 17090002, on right bank at bridge 0.3 mi (0.5 km) downstream from Cottage Grove Dam, 5.5 mi (8.8 km) south of Cottage Grove, and at mile 29.4 (47.3 km).

DRAINAGE AREA.--104 mi² (269 km²).

PERIOD OF RECORD.--January 1939 to current year. Prior to October 1944, published as "near Cottage Grove."

REVISED RECORDS.--WSP 1448: 1949(M).

GAGE.--Water-stage recorder. Datum of gage is 711.00 ft (216.713 m) National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). Jan. 1 to Oct. 12, 1939, nonrecording gage and Oct. 13, 1939, to Sept. 30, 1944, water-stage recorder at several sites and datums 0.8 mi (1.3 km) downstream.

REMARKS.--Records good. Flow regulated since 1942 by Cottage Grove Lake (see station 14153000). Small diversions for irrigation above station.

AVERAGE DISCHARGE.--41 years, 275 ft³/s (7.788 m³/s), 35.91 in/yr (912 mm/yr), 199,200 acre-ft/yr (246 hm³/yr), adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,910 ft³/s (167 m³/s) Dec. 24, 1964, gage height, 11.83 ft (3.606 m); no flow July 5-7, 1945, and for part of Aug. 24, 1947.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,590 ft³/s (73.3 m³/s) Dec. 5, gage height, 8.18 ft (2.493 m); minimum, 22 ft³/s (0.62 m³/s) Nov. 15-17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	193	339	332	216	279	253	54	84	79	69	51	50
2	193	193	874	259	165	251	54	86	79	54	51	242
3	190	106	1650	259	72	170	54	86	77	51	51	336
4	185	68	1970	259	74	100	54	86	77	51	51	332
5	185	303	2270	515	74	100	54	86	77	52	51	329
6	182	343	1960	737	75	89	55	86	79	52	51	326
7	182	165	1260	766	75	80	135	86	79	52	51	326
8	182	165	1240	415	75	82	248	86	79	52	51	322
9	180	165	1220	332	77	82	400	80	79	52	51	319
10	208	80	879	462	77	82	570	74	79	52	51	319
11	221	34	350	680	77	82	640	75	79	52	51	316
12	218	34	216	498	77	82	635	75	79	52	51	316
13	218	34	226	131	79	84	631	75	79	52	51	312
14	216	28	203	133	79	800	422	75	79	52	51	312
15	216	22	160	1120	79	1720	149	75	89	52	50	309
16	213	22	160	2060	79	1340	72	75	98	52	50	206
17	211	25	135	1990	79	800	74	75	98	52	50	155
18	240	407	112	1540	79	490	74	75	98	52	50	155
19	322	690	114	981	80	490	74	74	89	52	50	155
20	360	746	114	991	80	490	72	74	79	52	50	155
21	356	482	285	981	80	454	221	75	80	52	50	155
22	350	262	482	960	82	434	367	77	80	52	50	155
23	346	1070	438	929	84	367	332	77	80	51	50	153
24	343	1680	378	644	84	185	234	77	80	52	50	153
25	462	1690	353	407	86	72	144	77	80	52	50	153
26	490	1700	265	374	86	52	104	79	80	52	50	153
27	446	1650	218	371	86	52	104	75	80	52	50	153
28	442	785	218	329	112	52	91	77	80	51	50	153
29	430	282	160	291	213	52	82	77	80	51	50	153
30	422	297	139	288	---	52	82	79	80	51	50	151
31	411	---	139	282	---	52	---	79	---	51	50	---
TOTAL	8813	13867	18520	20200	2744	9491	6282	2437	2451	1624	1564	6824
MEAN	284	462	597	652	94.6	306	209	78.6	81.7	52.4	50.5	227
MAX	490	1700	2270	2060	279	1720	640	86	98	69	51	336
MIN	180	22	112	131	72	52	54	74	77	51	50	50
AC-FT	17480	27510	36730	40070	5440	18830	12460	4830	4860	3220	3100	13540
MEAN†	71.6	467	596	665	226	435	330	143	102	34.6	7.8	8.9
CFSM†	.69	4.49	5.73	6.39	2.17	4.18	3.17	1.37	.98	.33	.07	.09
IN.†	.79	5.01	6.61	7.37	2.35	4.83	3.54	1.58	1.09	.38	.09	.10
AC-FT†	4400	27790	36670	40870	13010	26760	19650	8780	6040	2130	480	530

CAL YR 1979 TOTAL 99590 MEAN 273 MAX 2270 MIN 22 AC-FT 197500 MEAN† 274 CFSM† 2.63 IN.† 35.73 AC-FT† 198120
WTR YR 1980 TOTAL 94817 MEAN 259 MAX 2270 MIN 22 AC-FT 188100 MEAN† 258 CFSM† 2.48 IN.† 33.75 AC-FT† 187140

† Adjusted for change in contents in Cottage Grove Lake.

14154500 ROW RIVER ABOVE PITCHER CREEK, NEAR DORENA, OR

LOCATION.--Lat 43°44'10", long 122°52'20", in NE¼ sec.24, T.21 S., R.2 W., Lane County, Hydrologic Unit 17090002, on right bank 0.5 mi (0.8 km) upstream from Pitcher Creek, 1.2 mi (1.9 km) northwest of Dorena, and at mile 13.2 (21.2 km).

DRAINAGE AREA.--211 mi^2 (546 km^2).

PERIOD OF RECORD.--September 1935 to current year. Prior to October 1949, published as "at Star."

GAGE.--Water-stage recorder. Datum of gage is 856.16 ft (260.958 m) National Geodetic Vertical Datum of 1929. Sept. 16, 1935, to Oct. 17, 1938, nonrecording gage at site 450 ft (137 m) upstream at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records good. Slight regulation caused by upsteam logponds. No diversion above station.

AVERAGE DISCHARGE.--45 years, 599 ft^3/s (16.96 m^3/s), 38.55 in/yr (979 mm/yr), 434,000 acre-ft/yr (535 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,100 ft^3/s (937 m^3/s) Dec. 22, 1964, gage height, 18.19 ft (5.544 m), from rating curve extended above 12,000 ft^3/s (340 m^3/s), on basis of slope-area measurement of peak flow; minimum, 10 ft^3/s (0.28 m^3/s) Sept. 24, 25, 1951, Oct. 7, 8, 1958.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 7,000 ft^3/s (198 m^3/s) and maximum discharge, 9,920 ft^3/s (281 m^3/s) Jan. 13, gage height, 10.39 ft (3.167 m); minimum, 18 ft^3/s (0.51 m^3/s) Oct. 12, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	622	487	580	235	622	393	302	390	161	56	32
2	20	386	1970	585	238	503	355	274	529	148	53	35
3	20	282	3000	560	706	433	329	256	971	140	51	42
4	19	409	1970	556	785	413	319	245	1020	149	51	34
5	19	952	1970	2170	556	409	416	233	844	138	50	29
6	19	551	1170	1820	556	447	748	221	678	130	51	27
7	19	374	816	1080	556	443	760	202	585	119	49	27
8	21	277	596	833	487	399	1040	187	491	111	48	26
9	21	218	470	748	423	361	2330	226	423	106	47	25
10	20	181	570	791	374	329	1890	349	371	111	45	24
11	19	153	478	695	333	487	1330	482	326	100	44	24
12	19	135	423	5710	298	512	1140	482	305	94	42	25
13	19	119	380	8970	271	897	1240	413	383	91	42	31
14	28	108	336	6170	256	3360	1160	368	440	87	42	31
15	50	99	298	3690	235	1830	934	329	386	86	41	29
16	37	113	266	2040	218	1160	791	285	340	82	40	27
17	30	202	243	1930	216	1040	797	250	308	78	39	25
18	41	701	223	1450	250	1240	661	226	271	75	40	29
19	891	650	235	1070	319	1120	601	209	243	74	42	37
20	754	487	250	827	364	1070	701	191	221	71	39	42
21	639	383	585	655	403	977	1120	181	202	70	37	68
22	288	712	791	538	512	797	952	202	191	67	37	45
23	352	1380	601	458	816	701	779	235	245	65	36	36
24	277	2340	827	409	580	617	678	326	211	64	36	31
25	1080	1660	601	371	503	551	585	850	226	62	36	29
26	565	1100	443	340	534	529	516	1110	271	61	34	28
27	374	810	371	305	516	556	478	952	243	60	34	27
28	352	612	326	269	804	491	458	797	216	59	36	27
29	343	551	292	245	804	462	406	617	194	58	34	27
30	346	534	308	240	---	447	343	491	177	56	33	25
31	897	---	374	240	---	423	---	409	---	57	33	---
TOTAL	7599	17101	21670	46345	13148	23626	24250	11900	11701	2830	1298	944
MEAN	245	570	699	1495	453	762	808	384	390	91.3	41.9	31.5
MAX	1080	2340	3000	8970	816	3360	2330	1110	1020	161	56	68
MIN	19	99	223	240	216	329	319	181	177	56	33	24
CFSM	1.16	2.70	3.31	7.09	2.15	3.61	3.83	1.82	1.85	.43	.20	.15
IN.	1.34	3.01	3.82	8.17	2.32	4.17	4.28	2.10	2.06	.50	.23	.17
AC-FT	15070	33920	42980	91930	26080	46860	48100	23600	23210	5610	2570	1870

CAL YR 1979 TOTAL 209262 MEAN 573 MAX 7490 MIN 19 CFSM 2.72 IN 36.89 AC-FT 415100
WTR YR 1980 TOTAL 182412 MEAN 498 MAX 8970 MIN 19 CFSM 2.36 IN 32.16 AC-FT 361800

14155000 DORENA LAKE NEAR COTTAGE GROVE, OR

LOCATION.--Lat 43°47'10", long 122°57'15", in SE¼ sec.32, T.20 S., R.2 W., Lane County, Hydrologic Unit 17090002, on left end of Dorena Dam on Row River, 5.0 mi (8.0 km) east of Cottage Grove, and at mile 7.61 (12.24 km).

DRAINAGE AREA.--265 mi² (686 km²).

PERIOD OF RECORD.--October 1949 to current year. Prior to October 1971, published as Dorena Reservoir near Cottage Grove.

REVISED RECORDS.--WRD OR-78-1: 1969.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by earthfill dam with concrete outlet and spillway, completed in 1949 by Corps of Engineers; controlled storage began Oct. 11, 1949. Capacity, 77,580 acre-ft (95.7 hm³) between elevations 739.0 ft (225.25 m), sill of outlet gates, and 835.0 ft (254.51 m), crest of spillway. Dead storage, 18 acre-ft (22,200 m³) below elevation 739.0 ft (225.25 m). Reservoir used for flood control and improvement of navigation. Figures given herein represent total contents.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 95,550 acre-ft (118 hm³) Dec. 23, 1964, elevation, 844.03 ft (257.260 m); minimum observed since first filling, 159 acre-ft (196,000 m³) Dec. 14, 1970, elevation, 743.60 ft (226.649 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 73,380 acre-ft (90.5 hm³) June 15, 16, elevation, 832.73 ft (253.816 m); minimum, 6,340 acre-ft (7.82 hm³) Nov. 6, elevation, 769.00 ft (234.391 m).

Capacity table (elevation, in feet, and total contents, in acre-feet)

760	2,810	780	12,530	800	28,490	820	52,480
765	4,560	785	15,850	805	33,700	825	60,060
770	6,840	790	19,580	810	39,380	830	68,470
775	9,540	795	23,780	815	45,620	835	77,600

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	806.13	773.38	770.98	771.74	775.90	799.25	815.70	825.40	831.50	832.01	831.52	829.02
2	805.30	772.05	777.20	772.13	775.90	798.94	816.10	825.60	831.60	832.02	831.45	828.50
3	804.44	770.79	782.26	772.15	778.00	798.99	816.50	825.70	832.40	832.05	831.38	827.69
4	803.57	771.15	781.18	772.19	780.20	799.49	816.80	825.80	832.70	832.10	831.31	826.83
5	802.68	770.47	779.35	778.50	781.60	800.04	817.40	825.90	832.56	832.13	831.23	825.76
6	801.79	769.13	775.17	782.20	782.70	800.70	818.40	826.00	832.26	832.15	831.16	825.10
7	800.90	769.15	772.01	782.80	783.60	801.40	819.10	826.00	832.10	832.15	831.09	824.22
8	799.92	769.18	771.01	782.40	784.50	802.04	820.00	826.10	832.06	832.14	831.02	823.32
9	798.92	769.39	770.72	778.30	785.10	802.56	821.80	826.20	831.99	832.17	830.95	822.42
10	797.90	769.70	770.89	772.50	785.50	803.03	822.93	826.50	831.95	832.21	830.87	821.50
11	796.87	769.95	770.55	771.30	785.90	804.45	822.92	827.00	832.04	832.23	830.79	820.76
12	795.84	770.14	770.33	791.20	786.36	810.05	822.84	827.50	832.14	832.24	830.71	820.36
13	794.80	770.38	770.16	811.50	786.75	812.23	822.73	827.80	832.41	832.24	830.64	819.99
14	793.79	770.55	770.38	822.00	787.06	812.05	822.70	828.20	832.66	832.24	830.56	819.62
15	792.81	770.68	770.61	825.80	787.32	812.20	822.20	828.20	832.73	832.24	830.47	819.24
16	791.78	770.88	770.66	825.10	787.52	812.10	821.70	828.50	832.63	832.22	830.36	818.85
17	790.66	771.28	770.56	823.30	787.73	812.80	821.70	828.70	832.40	832.21	830.28	817.45
18	789.46	774.13	770.36	820.10	788.14	813.90	821.70	828.80	832.19	832.19	830.22	818.09
19	789.75	775.61	770.23	815.30	788.79	814.40	822.20	828.90	832.10	832.15	830.15	817.72
20	789.06	775.43	770.28	809.50	789.55	814.70	822.80	828.90	832.08	832.13	830.08	817.43
21	788.02	774.41	771.27	802.90	790.40	814.90	823.30	829.00	832.08	832.10	829.99	817.13
22	786.17	774.75	771.87	795.60	791.66	814.50	823.10	829.10	832.14	832.06	829.89	816.76
23	784.48	776.35	771.42	790.10	793.69	813.90	822.80	829.20	832.29	832.02	829.80	816.39
24	782.38	778.88	771.68	786.60	795.00	813.70	822.90	829.60	832.35	831.97	829.72	816.00
25	782.72	779.58	771.02	784.30	795.92	813.80	823.20	830.50	832.41	831.93	829.65	815.61
26	781.30	778.12	770.62	782.30	796.72	814.00	823.70	831.70	832.42	831.88	829.55	815.22
27	779.09	775.35	770.51	780.10	797.47	814.20	824.10	832.00	832.35	831.83	829.45	814.83
28	776.70	772.97	770.12	778.30	798.65	814.60	824.50	832.00	832.25	831.77	829.35	814.42
29	774.35	772.09	770.06	777.40	799.27	814.90	824.90	832.00	832.10	831.71	829.27	813.99
30	772.60	771.13	770.42	776.90	---	815.10	825.20	831.90	832.03	831.64	829.17	813.59
31	773.62	---	770.90	776.40	---	815.40	---	831.70	---	831.59	829.08	---
MEAN	791.22	772.57	772.09	790.67	787.82	809.17	821.53	828.40	832.23	832.06	830.36	819.93
MAX	806.13	779.58	782.26	825.80	799.27	815.40	825.20	832.00	832.73	832.24	831.52	829.02
MIN	772.60	769.13	770.06	771.30	775.90	798.94	815.70	825.40	831.50	831.59	829.08	813.59
(†)	8770	7420	7300	10350	27770	46140	60380	71510	72110	71310	66860	43800
(‡)	-27050	-1350	-120	+3050	+17420	+18370	+14240	+11130	+600	-800	-4450	-23060

CAL YR 1979 MEAN 805.73 MAX 832.50 MIN 768.60 AC-FT‡ +460
WTR YR 1980 MEAN 807.40 MAX 832.73 MIN 769.13 AC-FT‡ +7980

† Contents, in acre-feet, at 2400, on last day of month.
‡ Change in contents, in acre-feet.

14155500 ROW RIVER NEAR COTTAGE GROVE, OR

LOCATION.--Lat 43°47'35", long 122°59'25", in NE¼ sec.36, T.20 S., R.3 W., Lane County, Hydrologic Unit 17090002, on right bank 1.7 mi (2.7 km) upstream from Mosby Creek, 2.1 mi (3.4 km) downstream from Dorena Dam, 3.5 mi (5.6 km) east of Cottage Grove, and at mile 5.5 (8.8 km).

DRAINAGE AREA.--270 mi^2 (699 km^2).

PERIOD OF RECORD.--January 1939 to current year. Prior to October 1947, published as "near Dorena."

GAGE.--Water-stage recorder. Datum of gage is 685.24 ft (208.861 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Jan. 5 to Oct. 12, 1939, nonrecording gage at site 180 ft (55 m) upstream at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records good. Flow regulated since October 1949 by Dorena Lake (see station 14155000). No diversion above station.

AVERAGE DISCHARGE.--41 years, 752 ft^3/s (21.30 m^3/s), 37.82 in/yr (961 mm/yr), 544,800 acre-ft/yr (672 hm^3/yr), adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,400 ft^3/s (606 m^3/s) Dec. 28, 1945, gage height, 18.20 ft (5.547 m); minimum, 0.20 ft^3/s (0.006 m^3/s) Sept. 25 to Oct. 7, 1958.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,100 ft^3/s (144 m^3/s) Jan. 21, gage height, 8.08 ft (2.463 m); minimum, 92 ft^3/s (2.61 m^3/s) July 28-31, Aug. 4, 7, Aug. 14 to Sept. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	453	789	655	479	442	783	283	201	666	197	94	92
2	468	777	870	601	301	783	186	201	513	153	94	494
3	479	628	2100	661	186	538	186	201	484	131	94	718
4	473	384	3070	683	193	292	186	201	900	131	92	712
5	468	1470	3230	925	197	266	186	201	1120	131	94	712
6	468	559	2900	1100	283	245	190	201	1040	131	94	706
7	463	374	1920	1180	351	208	453	201	832	131	92	700
8	484	266	1020	1220	323	179	683	201	611	131	94	695
9	499	179	695	2400	301	179	1060	201	554	107	94	689
10	494	131	689	2780	305	179	1470	201	468	94	94	689
11	489	134	689	1260	237	182	1470	201	296	94	94	564
12	484	102	590	789	182	186	1470	201	262	94	94	296
13	479	94	510	220	182	193	1460	201	266	94	94	288
14	473	97	384	232	182	1060	1460	201	310	94	92	288
15	468	99	337	1620	182	2280	1460	201	398	94	92	283
16	463	107	337	3530	182	1850	1230	201	484	94	92	283
17	484	182	333	4030	182	1100	900	182	559	94	92	283
18	549	351	333	4460	186	925	718	176	508	94	92	288
19	894	518	333	5000	190	1210	559	176	356	94	92	288
20	1190	718	310	4950	190	1210	523	176	270	94	92	288
21	1170	777	484	4950	190	1250	894	176	220	94	92	288
22	1060	765	864	4480	197	1300	1370	176	176	94	92	283
23	1020	1280	876	3110	201	1300	1250	176	176	94	92	283
24	1070	2030	906	1930	201	999	838	179	212	94	92	283
25	1050	2080	888	1340	258	650	484	179	232	94	92	283
26	1140	2080	633	1160	310	585	301	337	305	94	92	283
27	1160	2000	484	1130	310	533	241	783	342	94	92	283
28	1160	1460	479	876	408	437	241	931	342	92	92	279
29	1080	949	379	538	650	393	212	753	337	92	92	279
30	876	937	314	448	---	393	201	666	254	92	92	279
31	777	---	337	442	---	393	---	666	---	92	92	---
TOTAL	22285	22317	27949	58524	7502	22081	22165	8948	13493	3303	2874	12179
MEAN	719	744	902	1888	259	712	739	289	450	107	92.7	406
MAX	1190	2080	3230	5000	650	2280	1470	931	1120	197	94	718
MIN	453	94	310	220	182	179	186	176	176	92	92	92
AC-FT	44200	44270	55440	116100	14880	43800	43960	17750	26760	6550	5700	24160
MEAN†	279	721	899	1938	562	1011	978	470	445	93.5	20.3	18.5
CFSM†	1.03	2.67	3.33	7.18	2.08	3.74	3.62	1.74	1.65	.35	.08	.07
IN.†	1.19	2.98	3.84	8.28	2.24	4.32	4.04	2.01	1.90	.40	.09	.08
AC-FT†	17150	49920	55320	119150	32300	62170	58200	28880	27360	5750	1250	1100

CAL YR 1979 TOTAL 260919 MEAN 715 MAX 4050 MIN 83 AC-FT 517500 MEAN† 715 CFSM† 2.65 IN.† 35.98 AC-FT† 517950
WTR YR 1980 TOTAL 223620 MEAN 611 MAX 5000 MIN 92 AC-FT 443600 MEAN† 623 CFSM† 2.31 IN.† 31.40 AC-FT† 452080

† Adjusted for change in contents in Dorena Lake.

14156500 MOSBY CREEK AT MOUTH, NEAR COTTAGE GROVE, OR

LOCATION.--Lat 43°46'35", long 122°59'55", in SE¼NW¼ sec.1, T.21 S., R.3 W., Lane County, Hydrologic Unit 17090002, on left bank 3.5 mi (5.6 km) southeast of Cottage Grove and at mile 1.0 (1.6 km).

DRAINAGE AREA.--95.3 mi² (246.8 km²).

PERIOD OF RECORD.--September 1946 to current year. Monthly discharge only September 1946, published in WSP 1318.

REVISED RECORDS.--WSP 1738: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 676.62 ft (206.234 m) National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark).

REMARKS.--Records good. No regulation. Small diversions for irrigation above station.

AVERAGE DISCHARGE.--34 years, 243 ft³/s (6.882 m³/s), 34.63 in/yr (880 mm/yr), 176,100 acre-ft/yr (217 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,100 ft³/s (399 m³/s) Dec. 22, 1964, gage height, 13.37 ft (4.075 m), from rating curve extended above 4,600 ft³/s (130 m³/s) on basis of slope-area measurement of peak flow; minimum, 2.8 ft³/s (0.079 m³/s) Aug. 15, 1973, Sept. 24, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,500 ft³/s (70.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 13	0230	*4,250	120	*7.04	2.146	Mar. 14	0800	2,730	77.3	5.32	1.622

Minimum, 5.2 ft³/s (0.15 m³/s) Sept. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	206	174	202	93	329	140	105	108	46	13	7.8
2	8.2	143	861	227	95	262	128	95	128	43	13	8.2
3	7.8	108	1400	230	270	219	119	88	182	40	13	10
4	7.8	143	1020	238	310	193	113	82	287	44	12	9.8
5	7.4	387	975	941	219	182	134	76	250	43	12	8.2
6	7.4	254	574	861	230	197	296	73	197	39	11	7.4
7	8.2	171	382	511	246	189	459	67	167	35	11	6.7
8	8.6	122	274	387	214	171	499	64	137	33	11	6.4
9	8.6	95	214	360	178	150	829	80	113	33	11	6.4
10	8.2	76	242	487	153	140	756	131	97	34	10	6.1
11	7.8	66	206	426	134	193	517	171	88	30	9.8	5.8
12	7.4	57	178	2440	122	223	376	163	82	28	9.4	5.8
13	7.4	51	153	3700	111	464	319	137	100	26	9.8	7.4
14	11	46	134	2810	102	2010	292	125	111	25	9.4	9.0
15	17	43	119	1670	93	1140	246	113	95	26	9.0	8.2
16	15	50	105	920	86	792	206	100	86	23	8.6	7.4
17	12	69	97	823	84	663	189	86	82	21	9.8	6.7
18	14	365	88	649	108	700	163	78	76	21	9.8	8.6
19	319	470	100	470	189	567	153	73	69	20	10	10
20	360	283	122	355	189	481	197	66	64	20	10	11
21	315	193	278	283	197	431	707	62	61	19	9.0	17
22	134	266	437	234	300	344	574	67	56	18	7.8	13
23	97	700	349	193	542	292	398	73	71	17	8.2	10
24	88	961	470	167	376	250	305	80	64	17	7.8	9.4
25	499	817	349	150	292	223	246	344	66	17	8.2	8.6
26	292	614	250	137	262	202	206	339	73	16	7.8	8.6
27	189	447	193	122	250	186	171	262	67	16	7.8	8.2
28	182	315	160	108	437	156	150	202	61	15	7.8	8.2
29	160	250	137	100	426	143	134	156	56	14	7.8	8.2
30	160	210	137	95	---	137	116	128	51	13	7.4	7.8
31	254	---	153	90	---	134	---	108	---	13	7.4	---
TOTAL	3221.0	7978	10331	20386	6308	11763	9138	3794	3145	805	299.6	255.9
MEAN	104	266	333	658	218	379	305	122	105	26.0	9.66	8.53
MAX	499	961	1400	3700	542	2010	829	344	287	46	13	17
MIN	7.4	43	88	90	84	134	113	62	51	13	7.4	5.8
CFSM	1.09	2.79	3.49	6.91	2.29	3.98	3.20	1.28	1.10	.27	.10	.09
IN.	1.26	3.11	4.03	7.96	2.46	4.59	3.57	1.48	1.23	.31	.12	.10
AC-FT	6390	15820	20490	40440	12510	23330	18130	7530	6240	1600	594	508

CAL YR 1979 TOTAL 83488.9 MEAN 229 MAX 2860 MIN 4.6 CFSM 2.40 IN 32.59 AC-FT 165600
WTR YR 1980 TOTAL 77424.5 MEAN 212 MAX 3700 MIN 5.8 CFSM 2.23 IN 30.22 AC-FT 153600

14157500 COAST FORK WILLAMETTE RIVER NEAR GOSHEN, OR

LOCATION.--Lat 43°58'50", long 122°57'55", in NW¼ sec.29, T.18 S., R.2 W., Lane County, Hydrologic Unit 17090002, on right bank at downstream side of bridge on State Highway 58, 2.5 mi (4.0 km) southeast of Goshen, and at mile 6.4 (10.3 km).

DRAINAGE AREA.--642 mi² (1,663 km²).

PERIOD OF RECORD.--August 1905 to February 1912, October 1950 to current year. Monthly discharge only for some periods, published in WSP 1318.

REVISED RECORDS.--WSP 1218: Drainage area. WSP 1248: 1905-12. WSP 1935: 1956.

GAGE.--Water-stage recorder. Datum of gage is 473.80 ft (144.414 m) National Geodetic Vertical Datum of 1929. Aug. 23, 1905, to Feb. 7, 1912, nonrecording gage at site 600 ft (183 m) upstream at different datum.

REMARKS.--Records good. Flow regulated since 1942 by Cottage Grove Lake (see station 14153000) and since 1949 by Dorena Lake (see station 14155000). Several small diversions for logponds and irrigation above station.

AVERAGE DISCHARGE.--36 years (water years 1906-11, 1951-80), 1,651 ft³/s (46.76 m³/s), 1,196,000 acre-ft/yr (1.47 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 58,500 ft³/s (1,660 m³/s) Nov. 22, 1909, gage height, 19.5 ft (5.94 m), site and datum then in use, from rating curve extended above 15,000 ft³/s (425 m³/s); minimum, 36 ft³/s (1.02 m³/s) Sept. 29, 30, Oct. 11, 12, 1908.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,400 ft³/s (323 m³/s) Jan. 13, gage height, 11.36 ft (3.463 m); minimum, 138 ft³/s (3.91 m³/s) Aug. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	678	1550	1430	1270	1010	1760	775	566	924	377	158	164
2	678	1260	3380	1450	953	1630	566	540	881	336	158	358
3	693	1110	6000	1570	737	1420	540	522	744	277	158	1010
4	686	707	6610	1600	847	945	528	503	1200	273	161	1030
5	678	1270	6490	3790	731	938	586	491	1540	273	155	1040
6	678	1920	5380	3780	813	938	902	479	1500	269	158	1040
7	678	909	3650	3090	924	847	1320	474	1250	262	158	1030
8	693	737	2570	2760	854	762	1880	456	1010	254	158	1020
9	713	607	1910	3030	781	719	2800	491	840	251	158	1010
10	719	462	1890	4730	744	656	3690	522	794	236	161	1010
11	737	354	1700	3230	693	867	3330	560	586	225	155	990
12	731	340	1320	6520	560	867	3060	566	503	215	155	664
13	725	297	1190	9400	547	1460	2880	547	503	205	155	621
14	737	277	1030	7050	528	5150	2710	528	560	205	153	621
15	731	262	840	5830	515	6820	2260	509	607	199	155	621
16	725	273	807	7530	503	5380	1930	491	725	196	155	566
17	725	377	788	7740	497	3720	1470	456	807	190	155	451
18	794	1150	744	7230	573	2730	1240	413	781	187	158	451
19	1310	1060	756	6840	867	2850	1010	407	628	181	158	451
20	2030	1680	807	6570	794	2710	1050	402	479	181	158	462
21	1960	1520	1200	6390	762	2610	2420	397	440	187	155	468
22	1690	1490	2270	6040	902	2460	2770	407	368	178	155	462
23	1520	2740	2260	4790	1240	2310	2520	429	354	175	155	456
24	1560	4390	2200	3410	1050	1940	1890	423	392	175	158	451
25	1940	4480	2090	2340	960	1300	1360	593	434	175	161	451
26	2050	4280	1600	1990	1070	1120	938	713	491	175	158	445
27	1920	3670	1210	1900	990	1070	781	1080	560	178	158	445
28	1880	2970	1120	1720	1330	917	719	1330	547	178	155	445
29	1830	1770	990	1200	1610	827	649	1130	534	169	155	440
30	1640	1660	867	1010	---	794	586	967	491	164	158	434
31	1640	---	990	1010	---	794	---	938	---	158	161	---
TOTAL	35769	45572	66089	126810	24385	59311	49160	18330	21473	6704	4869	19107
MEAN	1154	1519	2132	4091	841	1913	1639	591	716	216	157	637
MAX	2050	4480	6610	9400	1610	6820	3690	1330	1540	377	161	1040
MIN	678	262	744	1010	497	656	528	397	354	158	153	164
AC-FT	70950	90390	131100	251500	48370	117600	97510	36360	42590	13300	9660	37900

CAL YR 1979 TOTAL 524787 MEAN 1438 MAX 7860 MIN 128 AC-FT 1041000
WTR YR 1980 TOTAL 477579 MEAN 1305 MAX 9400 MIN 153 AC-FT 947300

14158500 MCKENZIE RIVER AT OUTLET OF CLEAR LAKE, OR

LOCATION.--Lat 44°21'40", long 121°59'40", in SE¼ sec.8, T.14 S., R.7 E., Linn County, Hydrologic Unit 17090004, Willamette National Forest, on west bank of Clear Lake in narrow channel, 150 ft (46 m) upstream from outlet and at mile 89.6 (144.2 km).

DRAINAGE AREA.--92.4 mi² (239.3 km²), hydrologic drainage boundary uncertain owing to ground-water exchange.

PERIOD OF RECORD.--June 1912 to September 1915, October 1947 to current year. Monthly discharge only for some periods, published in WSP 1318.

REVISED RECORDS.--WSP 1288: 1949. WSP 1318: 1915(M). WSP 1738: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3,015.32 ft (919.070 m) National Geodetic Vertical Datum of 1929 (levels by Eugene Water and Electric Board). June 20, 1912, to July 31, 1915, nonrecording gage at site 1.0 mi (1.6 km) north at different datum.

REMARKS.--Records good except those for period of no gage-height record, Apr. 10 to May 20, which are fair. Flow regulated by natural storage in lake. At high stages an undetermined flow enters numerous sinkholes in lava rock along south edge of lake above station.

AVERAGE DISCHARGE.--36 years, 470 ft³/s (13.31 m³/s), 69.08 in/yr (1,755 mm/yr), 340,500 acre-ft/yr (420 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,300 ft³/s (93.5 m³/s) Dec. 23, 1964, gage height, 8.15 ft (2.484 m); minimum, 137 ft³/s (3.88 m³/s) Sept. 23, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,670 ft³/s (47.3 m³/s) Jan. 14, gage height, 5.49 ft (1.673 m); minimum, 141 ft³/s (3.99 m³/s) Oct. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	172	213	277	347	461	523	347	420	329	275	202	173
2	171	217	316	337	449	511	342	420	331	272	201	174
3	170	220	324	331	449	504	339	420	331	268	201	173
4	169	224	368	331	446	520	334	400	329	265	199	172
5	169	224	396	368	446	543	337	400	329	261	198	172
6	168	225	419	360	461	543	342	400	331	258	196	172
7	153	229	443	366	461	527	331	400	334	256	195	170
8	151	231	458	385	461	514	334	400	329	252	193	169
9	152	229	473	396	461	501	344	380	329	250	193	169
10	152	227	507	402	461	488	360	380	329	247	192	169
11	151	224	507	405	458	485	360	380	329	241	192	167
12	151	220	498	596	452	476	380	380	329	240	190	167
13	152	217	482	1310	446	473	400	380	329	236	189	167
14	153	213	470	1640	437	470	460	380	329	234	189	166
15	152	210	461	1300	428	455	500	380	326	232	187	165
16	151	210	440	1000	416	434	550	360	321	229	186	165
17	151	208	419	973	410	422	550	360	321	227	186	163
18	156	210	407	937	407	413	550	360	319	225	184	166
19	167	205	405	910	413	405	600	360	316	224	184	165
20	163	204	399	875	416	402	650	360	314	222	183	165
21	163	202	402	838	416	396	700	355	311	218	181	162
22	167	207	393	797	422	388	650	355	306	217	181	161
23	170	210	391	753	425	385	600	352	304	217	180	161
24	173	227	382	714	422	379	550	347	301	215	180	161
25	181	236	377	679	422	377	500	342	301	213	179	159
26	186	250	371	637	440	377	480	339	294	212	179	159
27	193	263	366	589	452	371	460	337	287	210	177	158
28	202	272	360	543	501	366	460	331	284	208	177	158
29	204	277	352	504	530	360	460	329	282	207	176	157
30	208	277	347	479	---	358	440	329	277	205	176	156
31	213	---	342	464	---	352	---	329	---	204	174	---
TOTAL	5234	6781	12552	20566	12869	13718	13710	11465	9481	7240	5800	4961
MEAN	169	226	405	663	444	443	457	370	316	234	187	165
MAX	213	277	507	1640	530	543	700	420	334	275	202	174
MIN	151	202	277	331	407	352	331	329	277	204	174	156
CFSM	1.83	2.45	4.38	7.18	4.81	4.79	4.95	4.00	3.42	2.53	2.02	1.79
IN.	2.11	2.73	5.05	8.28	5.18	5.52	5.52	4.62	3.82	2.91	2.34	2.00
AC-FT	10380	13450	24900	40790	25530	27210	27190	22740	18810	14360	11500	9840

CAL YR 1979 TOTAL 130291 MEAN 357 MAX 838 MIN 151 CFSM 3.86 IN 52.45 AC-FT 258400
WTR YR 1980 TOTAL 124377 MEAN 340 MAX 1640 MIN 151 CFSM 3.68 IN 50.07 AC-FT 246700

14158790 SMITH RIVER ABOVE SMITH RIVER RESERVOIR, NEAR BELKNAP SPRINGS, OR

LOCATION.--Lat 44°20'05", long 122°02'45", in SW¼SW¼ sec.24, T.14 S., R.6 E., Linn County, Hydrologic Unit 17090004, in Willamette National Forest, on right bank 200 ft (61 m) upstream from Smith River Reservoir, 0.7 mi (1.1 km) downstream from Browder Creek, 10 mi (16 km) north of town of Belknap Springs, and at mile 4.4 (7.1 km).

DRAINAGE AREA.--16.2 mi² (42.0 km²).

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 2,610.00 ft (795.528 m) National Geodetic Vertical Datum of 1929 (levels by Eugene Water and Electric Board). Prior to Sept. 10, 1964, at datum 1.56 ft (0.475 m) higher.

REMARKS.--Records good. No regulation or diversion above station.

AVERAGE DISCHARGE.--20 years, 90.8 ft³/s (2.571 m³/s), 76.12 in/yr (1,933 mm/yr), 65,780 acre-ft/yr (81.1 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,160 ft³/s (146 m³/s) Dec. 22, 1964, gage height, 11.9 ft (3.63 m), from floodmark, from rating curve extended above 560 ft³/s (15.9 m³/s), on basis of slope-area measurement of peak flow; minimum, 3.0 ft³/s (0.085 m³/s) Oct. 5, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 800 ft³/s (22.7 m³/s) and maximum discharge, 1,070 ft³/s (30.3 m³/s) Jan. 12, gage height, 7.92 ft (2.414 m); minimum, 3.0 ft³/s (0.085 m³/s) Oct. 5.

REVISIONS.--The maximum discharge for the water year 1978 has been revised to 2,800 ft³/s (79.3 m³/s) Nov. 25, 1977, gage height, 9.38 ft (2.859 m), superseding figure published in the report for 1978. Peak discharge of Dec. 13, 1977 (1500 hours) has been revised to 1,490 ft³/s (42.2 m³/s), gage height, 8.32 ft (2.536 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	49	61	124	100	144	39	101	54	17	6.1	4.1
2	3.2	42	405	109	126	124	38	96	56	17	6.1	6.4
3	3.2	38	415	112	200	116	38	89	54	17	5.8	4.8
4	3.2	54	442	124	178	137	40	94	50	15	5.8	4.1
5	3.2	69	309	377	148	141	53	87	49	15	5.5	3.9
6	3.2	56	206	244	170	130	59	75	54	14	5.5	3.9
7	3.3	46	158	168	148	112	52	65	50	13	5.5	3.9
8	3.3	41	126	135	133	99	63	59	45	13	5.3	3.7
9	3.3	36	124	112	112	87	128	62	42	13	5.3	3.5
10	3.5	32	133	92	99	79	120	58	39	13	5.0	3.5
11	3.5	29	105	91	86	73	110	56	37	12	5.0	3.5
12	3.7	26	92	705	76	66	128	52	40	12	4.8	3.9
13	3.7	24	79	986	68	65	195	47	39	11	4.8	4.8
14	6.1	22	73	951	62	66	272	44	37	11	4.8	3.9
15	6.1	21	68	525	57	57	275	44	35	11	4.5	3.7
16	4.5	24	62	347	53	52	247	39	32	10	4.5	3.5
17	4.3	35	61	272	53	52	268	38	30	9.9	4.5	3.3
18	17	38	61	203	76	53	258	37	26	9.5	5.3	5.5
19	42	33	75	155	118	52	272	37	25	9.1	4.8	5.0
20	26	31	86	130	135	54	290	36	23	8.7	4.5	8.4
21	23	29	99	109	114	51	251	36	22	8.7	4.3	7.7
22	23	65	89	94	103	49	198	39	22	8.4	4.3	4.8
23	30	78	82	87	94	47	176	39	21	8.0	4.3	4.3
24	27	234	72	86	94	45	168	47	30	7.7	4.3	4.1
25	59	170	65	82	105	44	155	62	26	7.7	4.1	3.9
26	63	114	59	72	170	46	165	70	25	7.3	4.1	3.7
27	53	86	54	60	173	44	178	63	22	7.3	4.1	3.5
28	45	69	50	55	192	42	170	57	21	7.0	4.1	3.5
29	42	59	47	50	173	43	137	51	20	6.7	4.1	3.5
30	49	58	44	48	---	42	110	45	19	6.7	4.1	3.3
31	68	---	47	46	---	40	---	50	---	6.4	4.5	---
TOTAL	631.5	1708	3849	6751	3416	2252	4653	1775	1045	333.1	149.7	129.6
MEAN	20.4	56.9	124	218	118	72.6	155	57.3	34.8	10.7	4.83	4.32
MAX	68	234	442	986	200	144	290	101	56	17	6.1	8.4
MIN	3.2	21	44	46	53	40	38	36	19	6.4	4.1	3.3
CFSM	1.26	3.51	7.65	13.5	7.28	4.48	9.57	3.54	2.15	.66	.30	.27
IN.	1.45	3.92	8.84	15.50	7.84	5.17	10.68	4.08	2.40	.76	.34	.30
AC-FT	1250	3390	7630	13390	6780	4470	9230	3520	2070	661	297	257

CAL YR 1979 TOTAL 27333.7 MEAN 74.9 MAX 477 MIN 3.2 CFSM 4.62 IN 62.76 AC-FT 54220
WTR YR 1980 TOTAL 26692.9 MEAN 72.9 MAX 986 MIN 3.2 CFSM 4.50 IN 61.29 AC-FT 52950

14158795 SMITH RIVER RESERVOIR NEAR BELKNAP SPRINGS, OR

LOCATION.--Lat 44°18'20", long 122°02'40", in SW¼SW¼ sec.36, T.14 S., R.6 E., Linn County, Hydrologic Unit 17090004, Willamette National Forest, in intake tower near left end of Smith River Dam on Smith River, 800 ft (244 m) upstream from Bunchgrass Creek, 8 mi (13 km) north of town of Belknap Springs, and at mile 2.1 (3.4 km).

DRAINAGE AREA.--18.2 mi^2 (47.1 km^2).

PERIOD OF RECORD.--March 1963 to current year.

GAGE.--Telemark with equipment to transmit elevations at 15-minute intervals. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Eugene Water and Electric Board).

REMARKS.--Reservoir is formed by earthfill dam with concrete spillway completed in 1963 by Eugene Water and Electric Board; storage began Mar. 18, 1963. Total capacity is 15,000 acre-ft (18.5 hm^3) at elevation 2,605.0 ft (794.00 m) top of spillway gates, and usable capacity is 9,900 acre-ft (12.2 hm^3) between elevations 2,525.0 ft (769.62 m), minimum power pool, and 2,605.0 ft (794.0 m). Storage of 5,100 acre-ft (6.29 hm^3), below elevation 2,525.0 ft (769.62 m), not normally available for release. Water used for power generation. Figures herein represent total contents.

COOPERATION.--Elevations and area-volume curves furnished by Eugene Water and Electric Board.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 15,200 acre-ft (18.7 hm^3) Dec. 22, 1964, elevation, 2,606.5 ft (794.46 m); minimum, 5,700 acre-ft (7.03 hm^3) Apr. 11, 14, 1964, elevation, 2,532.90 ft (772.028 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 14,660 acre-ft (18.1 hm^3) July 11, elevation, 2,603.28 ft (793.480 m); minimum, 12,550 acre-ft (15.5 hm^3) Mar. 16, elevation, 2,590.33 ft (789.533 m).

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept.30	2,601.58	14,370	-
Oct. 31	2,599.76	14,060	-310
Nov. 30	2,594.70	13,250	-810
Dec. 31	2,591.98	12,820	-430
CAL YR 1979	-	-	-330
Jan. 31	2,591.77	12,780	-40
Feb. 29	2,592.52	12,900	+120
Mar. 31	2,592.25	12,860	-40
Apr. 30	2,598.78	13,900	+1,040
May 31	2,601.45	14,350	+450
June 30	2,601.33	14,330	-20
July 31	2,602.02	14,470	+140
Aug. 31	2,602.59	14,540	+70
Sept.30	2,602.22	14,480	-60
WTR YR 1980	-	-	+110

14158850 MCKENZIE RIVER BELOW TRAIL BRIDGE DAM, NEAR BELKNAP SPRINGS, OR

LOCATION.--Lat 44°16'05", long 122°02'55", in T.15 S., R.6 E., (unsurveyed), Linn County, Hydrologic Unit 17090004, in Willamette National Forest, on left bank 0.4 mi (0.6 km) downstream from Trail Bridge Dam, 0.5 mi (0.8 km) upstream from Anderson Creek, 5 mi (8 km) north of town of Belknap Springs, and at mile 81.5 (131.1 km).

DRAINAGE AREA.--184 mi^2 (477 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,980.00 ft (603.504 m) National Geodetic Vertical Datum of 1929 (levels by Eugene Water and Electric Board). Prior to Oct. 11, 1963, at datum 5.60 ft (1.707 m) higher.

REMARKS.--Water-discharge records good. Flow regulated since 1963 by Smith River Reservoir (see station 14158795). Diurnal fluctuations by powerplants and by Trail Bridge reregulating reservoir upstream. Water is diverted from McKenzie River in SW¼ sec.20, T.14 S., R.7 E., to Smith River Reservoir and returned to river above station.

AVERAGE DISCHARGE.--21 years, 1,033 ft^3/s (29.25 m^3/s), 76.24 in/yr (1,936 mm/yr), 748,400 acre-ft/yr (923 hm^3/yr), adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,200 ft^3/s (317 m^3/s) Dec. 22, 1964, gage height, 12.45 ft (3.795 m), from rating curve extended above 3,700 ft^3/s (105 m^3/s) on basis of slope-area measurement of peak flow; minimum, 185 ft^3/s (5.24 m^3/s) Feb. 3, 1963; minimum daily, 425 ft^3/s (12.0 m^3/s) Nov. 23, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,620 ft^3/s (103 m^3/s) Jan. 14, gage height, 9.21 ft (2.807 m); minimum, 396 ft^3/s (11.2 m^3/s) Sept. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	602	672	773	856	972	1080	766	1070	721	659	572	555
2	591	640	1150	882	1030	987	734	1030	766	665	561	561
3	613	684	1260	918	1120	979	747	1020	773	665	561	549
4	653	710	1340	904	1080	1080	760	1000	766	665	583	549
5	672	733	1230	1270	1020	1070	734	1000	753	665	577	549
6	672	739	1100	1070	1030	1070	760	1000	760	653	577	549
7	629	672	1020	1050	1080	1050	760	979	760	635	577	544
8	607	629	1040	1010	1070	1020	786	891	760	617	577	522
9	580	672	1050	985	995	979	848	883	766	611	572	533
10	568	697	1060	977	972	964	862	883	766	623	544	555
11	574	704	1040	933	964	957	827	883	760	629	527	555
12	580	659	1010	2130	964	964	869	883	734	629	549	544
13	580	624	962	2940	957	949	1010	855	734	635	544	527
14	580	607	948	3320	920	995	1040	800	734	647	555	522
15	580	624	977	2450	905	949	1080	793	740	665	566	511
16	580	672	948	1890	876	934	1070	807	747	715	572	511
17	568	684	889	1790	869	883	1070	800	747	629	577	516
18	607	691	889	1640	905	862	1110	793	690	617	566	555
19	716	691	889	1530	964	869	1140	773	671	572	555	561
20	646	691	882	1480	957	883	1190	766	727	561	549	549
21	591	697	918	1390	920	883	1230	766	721	549	533	527
22	585	756	1010	1390	927	876	1220	773	708	589	544	522
23	624	710	1010	1370	942	848	1180	773	696	600	561	495
24	659	970	904	1290	934	813	1140	793	683	594	561	527
25	672	933	862	1260	927	813	1140	807	696	594	561	544
26	672	856	856	1220	1030	834	1140	807	727	594	561	544
27	672	779	856	1160	1000	869	1140	793	721	589	561	538
28	672	791	856	1100	1080	876	1190	793	696	577	555	516
29	665	762	836	1000	1090	827	1170	773	659	583	538	516
30	665	756	830	949	---	780	1120	690	659	583	538	516
31	727	---	798	942	---	766	---	671	---	583	544	---
TOTAL	19402	21505	30193	43096	28500	28709	29833	26348	21841	19192	17318	16062
MEAN	626	717	974	1390	983	926	994	850	728	619	559	535
MAX	727	970	1340	3320	1120	1080	1230	1070	773	715	583	561
MIN	568	607	773	856	869	766	734	671	659	549	527	495
AC-FT	38480	42660	59890	85480	56530	56940	59170	52260	43320	38070	34350	31860
MEAN†	621	703	967	1390	985	925	1012	857	728	621	560	534
CFSM†	3.38	3.82	5.26	7.55	5.35	5.03	5.50	4.66	3.96	3.38	3.04	2.90
IN.†	3.89	4.27	6.06	8.71	5.77	5.80	6.13	5.37	4.41	3.89	3.51	3.24
AC-FT†	38170	41850	59460	85440	56650	56900	60210	52710	43300	38210	34420	31800

CAL YR 1979 TOTAL 316805 MEAN 868 MAX 1770 MIN 568 AC-FT 628400 MEAN† 867 CFSM† 4.72 IN.† 64.02 AC-FT† 628070
WTR YR 1980 TOTAL 301999 MEAN 825 MAX 3320 MIN 495 AC-FT 599000 MEAN† 825 CFSM† 4.48 IN.† 61.07 AC-FT† 599110

† Adjusted for change in contents in Smith River Reservoir.

14158850 MCKENZIE RIVER BELOW TRAIL BRIDGE DAM, NEAR BELKNAP SPRINGS, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1976 to current year.
WATER TEMPERATURES: November 1976 to current year.

INSTRUMENTATION.--Dual conductivity-temperature recorder since November 1976.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 67 micromhos Nov. 9, 10, 1977; minimum recorded, 35 micromhos Dec. 15, 1977.
WATER TEMPERATURES: Maximum recorded, 12.0°C Aug. 1, 1977; minimum recorded, 2.5°C Jan. 26, 1979.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 63 micromhos on many days during August and September; minimum, 36 micromhos Jan. 14.
WATER TEMPERATURES: Maximum, 10.0°C July 21, 28, Aug. 13, 17; minimum, 3.0°C Jan. 28 to Feb. 1.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	PH FIELD (UNITS)	OXYGEN, DIS-SOLVED (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRD-MHOS)	SILICA, DIS-SOLVED (MG/L AS SIO2)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)
FEB												
26...	1030	1100	4.8	--	12.4	48	20	3.4	1.6	3.2	.9	21
SEP												
29...	1115	556	7.6	7.1	11.2	64	23	5.0	2.0	4.3	1.2	24

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
FEB												
26...	1.1	.9	.1	.05	.00	.05	.070	1.5	15	0	--	44
SEP												
29...	2.2	.8	.1	.00	.22	.22	.050	1.0	21	0	84	53

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
FEB												
26...	131	1	0	0	<1	0	0	0	<3	9	1	50
SEP												
29...	126	1	1	0	<1	10	0	0	<3	19	1	140

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
FEB											
26...	<10	9	0	0	<1	40	4	0	0	--	--
SEP											
29...	80	8	0	10	4	50	20	0	0	.1	.0

14158850 MCKENZIE RIVER BELOW TRAIL BRIDGE DAM, NEAR BELKNAP SPRINGS, OR--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	57	54	51	46	45	51	---	54	---	59	61
2	59	57	52	51	46	45	50	---	53	---	59	61
3	59	57	50	51	46	45	51	---	54	---	59	61
4	59	56	48	51	45	45	51	---	54	---	59	61
5	59	56	48	49	45	45	53	---	54	---	59	61
6	59	56	47	49	45	45	51	---	55	---	59	61
7	59	56	47	49	45	46	51	---	56	---	59	58
8	59	57	48	50	45	45	51	---	---	---	59	---
9	59	57	48	50	45	46	51	---	---	---	59	---
10	59	57	48	50	46	46	51	---	---	---	59	57
11	59	56	48	50	46	46	51	---	---	57	59	57
12	60	56	49	47	46	46	51	---	---	56	59	58
13	60	56	50	42	46	47	51	---	---	56	60	58
14	60	57	50	38	47	47	50	---	---	56	61	59
15	60	57	50	38	46	47	49	---	---	57	61	59
16	60	56	50	38	47	47	49	---	---	57	61	60
17	60	56	50	40	48	47	49	---	---	57	61	58
18	60	56	50	40	47	48	48	---	---	57	61	---
19	59	56	50	41	47	48	48	---	---	57	61	---
20	59	56	50	42	47	48	46	---	---	57	61	---
21	59	56	50	42	47	48	---	---	---	57	61	---
22	59	56	50	43	48	48	---	52	---	58	61	---
23	59	55	50	43	47	48	---	52	---	57	61	---
24	59	55	50	43	47	48	---	52	---	58	61	---
25	59	54	50	44	47	49	---	52	---	58	61	---
26	58	54	50	45	47	49	---	52	---	58	61	---
27	58	53	50	45	46	49	---	52	---	58	61	57
28	58	54	50	45	46	50	---	52	---	58	61	59
29	57	54	51	46	45	49	---	52	---	58	61	59
30	57	54	52	46	---	50	---	53	---	58	61	59
31	57	---	52	46	---	50	---	53	---	59	61	---
MEAN	59	56	50	45	46	47	50	52	54	57	60	59

14158850 MCKENZIE RIVER BELOW TRAIL BRIDGE DAM, NEAR BELKNAP SPRINGS, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.5	7.5	7.0	6.5	5.0	4.5	5.0	4.5	3.5	3.0	5.0	4.5
2	8.5	7.5	7.0	6.0	5.5	4.5	5.0	4.5	4.0	3.5	5.0	4.5
3	8.0	7.5	7.0	6.0	5.0	4.5	5.0	4.5	4.0	3.5	5.0	4.5
4	8.0	7.5	7.0	6.0	5.5	5.0	5.0	4.5	4.0	3.5	5.0	4.5
5	8.5	7.5	6.5	6.0	5.5	5.0	5.0	4.5	4.0	3.5	5.0	4.5
6	8.5	7.5	7.0	6.0	5.0	4.5	5.0	4.5	4.0	3.5	5.0	4.5
7	8.5	7.5	6.5	6.0	5.0	5.0	5.0	4.5	4.5	4.0	5.0	4.5
8	8.5	7.5	6.5	6.0	5.0	4.5	4.5	4.0	4.0	3.5	5.0	4.5
9	8.0	7.5	6.5	5.5	5.0	4.5	5.0	4.0	4.0	3.5	5.0	4.5
10	8.0	7.5	6.5	5.5	5.0	4.5	4.5	4.0	4.5	3.5	5.0	4.5
11	8.0	7.5	6.0	5.5	5.0	4.5	4.5	4.0	4.0	4.0	5.0	4.5
12	8.0	7.5	6.0	5.5	5.0	4.5	4.5	4.0	4.0	4.0	5.0	4.5
13	8.0	7.0	6.0	5.5	5.0	4.5	4.5	4.0	4.5	4.0	5.0	4.5
14	8.0	7.0	6.0	5.5	5.0	4.5	4.5	4.0	4.5	4.0	5.0	4.0
15	8.0	7.0	6.0	5.5	5.0	4.5	4.5	4.0	4.5	4.0	4.5	4.0
16	8.0	7.0	6.0	5.5	5.0	4.5	4.5	4.0	4.5	4.0	4.5	4.0
17	8.0	7.0	6.0	5.5	5.0	4.5	4.5	4.0	4.5	4.0	4.5	4.0
18	8.0	7.0	6.0	5.5	5.0	4.5	4.5	4.0	4.5	4.0	4.5	4.0
19	8.0	7.0	6.0	5.5	5.0	4.5	4.0	4.0	4.5	4.0	4.5	4.0
20	8.0	7.0	6.0	5.5	5.0	4.5	4.5	4.0	4.5	4.0	5.0	4.0
21	7.5	7.0	5.5	5.0	5.5	4.5	4.5	4.0	4.5	4.0	4.5	4.0
22	7.5	7.0	5.5	5.0	5.0	4.5	4.5	4.0	4.5	4.0	4.5	3.5
23	7.5	6.5	5.5	5.0	5.0	4.5	4.5	4.0	4.5	4.0	5.0	4.5
24	7.5	6.5	5.5	5.0	5.0	4.5	4.5	4.0	4.5	4.0	5.0	4.0
25	7.5	6.5	5.5	5.0	5.0	4.5	4.5	4.0	5.0	4.0	5.0	4.0
26	7.5	6.5	5.5	4.5	5.0	4.5	4.5	3.5	5.0	4.0	5.0	4.5
27	7.5	6.5	5.5	5.0	5.0	4.5	3.5	3.5	5.0	4.5	5.0	4.0
28	7.5	6.5	5.0	4.5	5.0	4.5	4.0	3.0	5.0	4.5	5.0	4.5
29	7.5	6.5	5.0	4.5	5.0	4.5	3.5	3.0	5.0	4.5	5.0	4.5
30	7.0	6.5	5.0	4.5	5.0	4.5	3.5	3.0	---	---	5.0	4.0
31	7.0	6.5	---	---	5.0	4.5	3.5	3.0	---	---	5.0	4.5
MONTH	8.5	6.5	7.0	4.5	5.5	4.5	5.0	3.0	5.0	3.0	5.0	3.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	5.0	4.5	---	---	7.0	6.5	---	---	9.5	8.5	9.0	8.0
2	5.0	4.5	---	---	7.0	6.5	---	---	9.5	8.0	9.5	8.5
3	5.0	4.5	---	---	7.5	6.5	---	---	9.5	8.5	9.0	8.0
4	5.0	4.5	---	---	7.5	6.5	---	---	9.5	8.5	9.0	8.0
5	5.0	4.5	---	---	7.5	6.5	---	---	9.5	8.5	9.0	8.0
6	5.0	4.0	---	---	7.5	6.5	---	---	9.5	8.5	9.0	8.0
7	4.5	4.0	---	---	7.5	7.0	---	---	9.5	8.5	9.5	7.5
8	5.0	4.5	---	---	---	---	---	---	9.5	8.5	---	---
9	5.0	4.5	---	---	---	---	---	---	9.5	8.5	---	---
10	5.5	4.5	---	---	---	---	---	---	9.5	8.0	9.0	7.5
11	6.0	5.0	---	---	---	---	8.5	7.5	9.5	8.0	9.0	7.5
12	6.5	5.5	---	---	---	---	8.5	7.0	9.5	8.5	9.0	7.5
13	6.0	5.5	---	---	---	---	8.5	7.0	10.0	8.5	9.0	7.5
14	5.5	5.5	---	---	---	---	9.0	7.5	9.5	8.5	9.0	7.5
15	6.0	5.5	---	---	---	---	9.0	7.5	9.5	8.5	9.0	8.0
16	6.0	5.5	---	---	---	---	9.0	7.5	9.5	8.5	9.0	8.0
17	6.0	5.5	---	---	---	---	9.0	8.0	10.0	8.5	9.5	8.0
18	6.0	5.5	---	---	---	---	9.0	7.5	9.5	8.5	---	---
19	6.0	6.0	---	---	---	---	9.0	7.5	9.5	8.5	---	---
20	6.0	5.5	---	---	---	---	9.0	7.5	9.5	8.5	---	---
21	---	---	---	---	---	---	10.0	8.5	9.5	8.5	---	---
22	---	---	7.5	6.5	---	---	9.5	7.5	9.5	8.5	---	---
23	---	---	7.0	6.5	---	---	9.5	8.0	9.5	8.5	---	---
24	---	---	7.0	6.5	---	---	9.5	8.0	9.5	8.5	---	---
25	---	---	7.0	6.5	---	---	9.5	8.5	9.5	8.5	---	---
26	---	---	7.0	6.5	---	---	9.5	8.5	9.5	8.5	8.5	---
27	---	---	7.0	6.5	---	---	9.5	8.0	9.5	8.0	8.5	8.0
28	---	---	7.0	6.0	---	---	10.0	8.5	9.5	8.0	8.5	8.0
29	---	---	7.0	6.5	---	---	9.5	8.5	9.5	8.0	8.5	8.0
30	---	---	7.0	6.5	---	---	9.5	8.5	9.5	8.0	8.5	8.0
31	---	---	7.0	6.5	---	---	9.5	8.5	9.0	8.0	---	---
MONTH	6.5	4.0	7.5	6.0	7.5	6.5	10.0	7.0	10.0	8.0	9.5	7.5

14158930 BUDWORM CREEK NEAR BELKNAP SPRINGS, OR

LOCATION.--Lat 44°15'29", long 122°03'40", T.15 S., R.6 E., (unsurveyed), Linn County, Hydrologic Unit 17090004, Willamette National Forest, on right bank 0.1 mi (0.2 km) upstream from Deer Creek, 4.8 mi (7.7 km) north of town of Belknap Springs.

DRAINAGE AREA.--3.00 mi^2 (7.77 km^2).

PERIOD OF RECORD.--July 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,040 ft (622 m), from topographic map.

REMARKS.--Records fair. No regulation or diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 472 ft^3/s (13.4 m^3/s) Jan. 12, 1980, gage height, 3.82 ft (1.164 m), from rating curve extended above 75 ft^3/s (2.12 m^3/s); minimum, 0.46 ft^3/s (0.013 m^3/s) Oct. 1-14, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 472 ft^3/s (13.4 m^3/s) Jan. 12, gage height, 3.82 ft (1.164 m), from rating curve extended above 75 ft^3/s (2.12 m^3/s); minimum, 0.46 ft^3/s (0.013 m^3/s) Oct. 1-14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.51	10	11	19	10	16	8.1	8.5	6.5	3.6	1.5	1.1
2	.46	7.7	97	16	14	14	7.6	8.0	7.5	3.4	1.5	1.3
3	.46	6.4	71	17	28	12	7.4	7.5	9.0	3.4	1.5	1.3
4	.46	9.4	59	18	24	14	7.4	7.0	8.5	3.4	1.4	.99
5	.46	12	41	62	18	16	8.6	6.5	8.0	3.2	1.4	.93
6	.46	9.7	24	36	20	16	9.6	6.5	8.0	3.0	1.4	.87
7	.46	7.7	17	22	18	14	9.3	6.0	8.5	3.0	1.4	.77
8	.46	6.4	14	16	16	12	13	5.5	8.0	2.8	1.3	.77
9	.46	5.4	13	15	14	11	27	6.0	7.5	2.6	1.3	.77
10	.46	4.7	14	13	12	10	24	6.5	6.5	2.6	1.3	.68
11	.46	4.3	11	11	11	9.9	20	6.0	6.0	2.5	1.3	.68
12	.46	3.8	10	254	9.9	9.3	21	6.0	5.5	2.5	1.3	.73
13	.46	3.6	9.1	297	9.3	12	34	5.5	6.0	2.4	1.3	.77
14	.51	3.3	8.6	219	8.6	18	44	5.0	5.5	2.4	1.2	.77
15	.62	3.1	8.2	64	7.9	14	38	5.0	5.0	2.3	1.2	.73
16	.62	3.6	7.7	33	7.6	11	29	4.6	5.0	2.2	1.2	.68
17	.62	5.4	7.4	27	7.6	11	32	4.4	4.6	2.2	1.2	.68
18	3.6	7.0	7.2	20	9.1	11	27	4.2	4.4	2.1	1.3	.99
19	11	5.6	8.6	15	14	11	26	4.0	4.2	2.1	1.3	.99
20	8.2	5.2	9.9	12	14	12	29	3.8	4.0	2.0	1.2	1.6
21	5.6	4.9	14	11	13	11	25	3.6	3.8	2.0	1.2	1.5
22	4.0	11	13	9.6	12	10	18	3.8	3.6	1.9	1.1	1.0
23	4.6	17	11	9.3	12	9.9	16	4.2	3.6	1.8	1.1	.87
24	4.3	62	11	9.3	12	9.3	16	4.6	3.8	1.8	1.1	.87
25	9.7	35	9.9	9.1	12	8.8	15	7.0	5.0	1.8	1.1	.82
26	8.2	19	8.9	8.3	18	9.1	15	10	5.0	1.7	1.0	.77
27	8.6	13	8.2	7.4	18	9.1	15	13	4.8	1.7	1.0	.77
28	7.4	10	7.4	7.0	20	8.8	12	11	4.4	1.7	1.0	.77
29	6.2	8.6	7.0	6.0	19	9.1	11	9.0	4.0	1.7	1.0	.82
30	7.7	9.4	6.6	5.6	---	8.8	10	7.5	3.8	1.6	1.0	.82
31	16	---	7.0	5.4	---	8.6	---	6.5	---	1.6	1.1	---
TOTAL	113.50	314.2	552.7	1274.0	409.0	356.7	575.0	196.7	170.0	73.0	38.2	27.11
MEAN	3.66	10.5	17.8	41.1	14.1	11.5	19.2	6.35	5.67	2.35	1.23	.90
MAX	16	62	97	297	28	18	44	13	9.0	3.6	1.5	1.6
MIN	.46	3.1	6.6	5.4	7.6	8.6	7.4	3.6	3.6	1.6	1.0	.68
CFSM	1.22	3.50	5.93	13.7	4.70	3.83	6.40	2.12	1.89	.78	.41	.30
IN.	1.41	3.89	6.85	15.79	5.07	4.42	7.13	2.44	2.11	.90	.47	.34
AC-FT	225	623	1100	2530	811	708	1140	390	337	145	76	54

CAL YR 1979 TOTAL 4213.01 MEAN 11.5 MAX 183 MIN .46 CFSM 3.83 IN 52.22 AC-FT 8360
WTR YR 1980 TOTAL 4100.11 MEAN 11.2 MAX 297 MIN .46 CFSM 3.73 IN 50.82 AC-FT 8130

14159000 MCKENZIE RIVER AT MCKENZIE BRIDGE, OR

LOCATION.--Lat 44°10'45", long 122°07'45", on line between NE¼ and NW¼ sec.18, T.16 S., R.6 E., Lane County, Hydrologic Unit 17090004, Willamette National Forest, on left bank 1.0 mi (1.6 km) upstream from Glen Creek, 1.7 mi (2.7 km) east of town of McKenzie Bridge, and at mile 69.9 (112.5 km).

DRAINAGE AREA.--348 mi² (901 km²) at cableway 1.2 mi (1.9 km) upstream, where all discharge measurements are made.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1910 to current year. Monthly discharge only for some periods, published in WSP 1318. Published as "near McKenzie Bridge" August 1910 to September 1911 and October 1914 to September 1916.

REVISED RECORDS.--WSP 1248: 1911-16, 1920-25. WSP 1448: 1919. WSP 1638: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,419.04 ft (432.523 m) National Geodetic Vertical Datum of 1929. Prior to June 2, 1932, nonrecording gage at several sites within 2 mi (3 km) of present site at various datums.

REMARKS.--Water-discharge records good. Flow regulated since March 1963 by Smith River Reservoir (see station 14158795). No diversion above station. All records given herein are for measuring site.

AVERAGE DISCHARGE.--70 years, 1,680 ft³/s (47.58 m³/s), 1,217,000 acre-ft/yr (1.50 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,100 ft³/s (541 m³/s) Dec. 22, 1964, gage height, 10.36 ft (3.158 m), from rating curve extended above 7,100 ft³/s (201 m³/s) on basis of slope-area measurement of peak flow; minimum, 805 ft³/s (22.8 m³/s) Oct. 20, 1931.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,160 ft³/s (203 m³/s) Jan. 14, gage height, 4.94 ft (1.506 m); minimum, 900 ft³/s (25.5 m³/s) Oct. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	956	1170	1310	1480	1670	1780	1410	1700	1310	1200	1050	980
2	948	1100	2190	1490	1720	1660	1370	1640	1360	1200	1030	989
3	964	1120	2440	1550	2010	1630	1360	1620	1370	1200	1030	972
4	998	1190	2500	1520	1930	1780	1380	1600	1360	1200	1050	972
5	1020	1250	2290	2400	1790	1770	1360	1600	1350	1200	1050	964
6	1020	1220	1960	2030	1860	1760	1410	1590	1370	1190	1040	964
7	980	1140	1760	1840	1900	1720	1400	1570	1390	1160	1040	964
8	948	1080	1720	1740	1850	1670	1460	1480	1370	1140	1040	940
9	932	1100	1710	1710	1730	1610	1630	1470	1370	1140	1030	940
10	924	1110	1760	1670	1680	1590	1690	1490	1360	1150	1010	964
11	932	1110	1680	1600	1660	1590	1630	1470	1350	1150	980	972
12	940	1070	1620	4300	1630	1590	1640	1460	1320	1150	998	972
13	932	1020	1570	6480	1610	1610	1870	1430	1330	1150	1010	956
14	940	989	1530	6730	1580	1760	1990	1380	1320	1170	1010	940
15	940	998	1530	4630	1550	1690	2030	1360	1330	1180	1020	932
16	932	1060	1510	3590	1510	1620	1960	1370	1320	1240	1020	924
17	924	1100	1440	3260	1500	1600	1960	1360	1320	1140	1030	932
18	989	1160	1440	2880	1530	1600	1960	1350	1270	1130	1020	980
19	1270	1140	1460	2600	1630	1600	1980	1330	1240	1090	998	980
20	1150	1120	1460	2450	1640	1600	2080	1320	1290	1070	989	998
21	1040	1120	1530	2280	1590	1600	2100	1320	1290	1050	972	972
22	1010	1220	1600	2220	1590	1590	1990	1330	1270	1080	980	948
23	1040	1270	1610	2170	1590	1570	1920	1330	1260	1100	998	916
24	1080	1800	1500	2050	1590	1510	1860	1350	1240	1100	998	932
25	1150	1730	1440	1990	1580	1490	1850	1390	1280	1100	989	948
26	1140	1550	1420	1930	1740	1510	1840	1420	1290	1090	989	948
27	1140	1410	1410	1870	1720	1550	1850	1440	1280	1080	989	948
28	1120	1360	1400	1800	1830	1530	1900	1410	1260	1070	989	924
29	1100	1320	1370	1700	1830	1490	1840	1380	1210	1070	964	924
30	1100	1300	1350	1600	---	1440	1760	1310	1200	1070	964	924
31	1290	---	1330	1580	---	1420	---	1270	---	1070	964	---
TOTAL	31849	36327	50840	77140	49040	49930	52480	44540	39280	35130	31241	28619
MEAN	1027	1211	1640	2488	1691	1611	1749	1437	1309	1133	1008	954
MAX	1290	1800	2500	6730	2010	1780	2100	1700	1390	1240	1050	998
MIN	924	989	1310	1480	1500	1420	1360	1270	1200	1050	964	916
AC-FT	63170	72050	100800	153000	97270	99040	104100	88350	77910	69680	61970	56770

CAL YR 1979 TOTAL 550447 MEAN 1508 MAX 3830 MIN 924 AC-FT 1092000
WTR YR 1980 TOTAL 526416 MEAN 1438 MAX 6730 MIN 916 AC-FT 1044000

14159000 MCKENZIE RIVER AT MCKENZIE BRIDGE, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1976 to current year.
WATER TEMPERATURES: November 1976 to current year.

INSTRUMENTATION.--Conductivity and temperature recorder since November 1976.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 78 micromhos Jan. 2, 1977; minimum, 22 micromhos Nov. 25, 1977.
WATER TEMPERATURES: Maximum recorded, 13.5°C Aug. 1, 3, 1977; minimum, 3.0°C Dec. 31, 1978, Jan. 1, 1979.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 67 micromhos Aug. 10, Sept. 19; minimum not recorded.
WATER TEMPERATURES: Maximum, 13.0°C July 21, 28, Aug. 1; minimum not recorded.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	PH FIELD (UNITS)	OXYGEN, DIS-SOLVED (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SILICA, DIS-SOLVED (MG/L AS SIO2)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)
FEB												
26...	1230	1840	6.0	--	12.0	53	20	3.4	1.5	3.4	.8	20
SEP												
29...	1445	948	9.0	7.5	11.3	64	23	4.0	1.7	4.4	1.2	25

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
FEB												
26...	.3	2.8	.1	.06	.00	.06	.050	.9	15	0	--	44
SEP												
29...	.1	1.7	.1	.00	.20	.20	.050	1.0	17	0	49	51

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
FEB												
26...	219	2	0	1	<1	0	0	0	<3	7	0	270
SEP												
29...	125	1	1	0	<1	20	0	2	<3	34	0	100

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
FEB											
26...	<10	7	0	0	<1	10	9	0	0	--	--
SEP											
29...	<10	10	0	10	<1	60	<3	0	0	.0	.0

14159000 MCKENZIE RIVER AT MCKENZIE BRIDGE, OR--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	58	57	53	---	54	58	52	55	59	61	62
2	61	59	49	53	---	54	59	52	55	59	61	62
3	65	59	46	52	---	55	58	52	55	60	61	63
4	65	58	45	52	---	54	59	53	56	60	61	62
5	64	58	46	46	---	54	60	53	56	59	61	62
6	64	58	48	47	---	54	60	52	55	60	62	62
7	65	59	50	49	---	54	59	53	55	59	61	63
8	64	60	51	51	---	54	58	53	55	60	61	63
9	64	60	51	51	---	55	55	53	56	60	61	62
10	60	60	51	52	---	55	55	53	56	60	62	62
11	61	60	52	52	---	55	55	54	56	60	62	62
12	61	61	52	---	---	55	55	54	56	60	62	62
13	61	61	53	---	---	54	54	54	56	60	61	62
14	61	61	53	---	---	54	53	54	57	60	62	63
15	62	61	54	---	---	55	51	54	57	60	62	63
16	62	60	54	---	---	56	51	54	58	60	62	63
17	61	59	54	---	---	56	51	55	57	61	62	63
18	60	59	54	---	---	56	50	55	58	60	62	63
19	58	60	54	---	---	56	50	55	59	61	62	63
20	60	60	53	---	---	54	49	55	59	60	62	62
21	60	60	52	---	---	55	49	55	59	60	62	63
22	61	58	53	---	---	55	50	54	60	61	62	63
23	60	57	53	---	---	56	51	55	60	60	62	63
24	60	51	53	---	---	57	51	55	61	61	62	63
25	58	52	54	---	---	57	51	55	60	61	62	63
26	59	55	55	---	55	57	51	55	60	61	62	63
27	59	56	55	---	54	57	51	54	59	61	62	63
28	59	56	55	---	53	58	51	54	59	61	62	63
29	60	57	55	---	54	59	51	54	59	61	62	64
30	59	57	55	---	---	58	52	54	59	61	62	64
31	57	---	55	---	---	58	---	55	---	61	62	---
MEAN	61	58	52	51	54	56	54	54	57	60	62	63

14159000 MCKENZIE RIVER AT MCKENZIE BRIDGE, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	9.0	7.5	7.5	6.5	6.0	5.5	6.0	5.5	---	---	7.0	6.0
2	9.5	8.0	7.5	6.5	6.0	5.5	5.5	5.0	---	---	7.0	6.5
3	9.0	7.5	7.0	6.5	6.0	6.0	6.0	5.5	---	---	7.0	6.0
4	9.0	7.5	7.0	7.0	6.0	6.0	6.0	5.5	---	---	7.0	6.5
5	9.5	8.0	7.5	7.0	6.0	5.5	6.0	5.5	---	---	7.0	6.5
6	9.0	8.0	7.5	6.5	6.0	5.5	5.5	5.0	---	---	7.0	6.0
7	9.5	8.0	7.0	6.5	6.0	5.5	5.0	4.5	---	---	7.0	6.0
8	9.0	8.0	7.0	6.0	6.0	5.5	5.0	4.0	---	---	7.0	6.0
9	9.0	7.5	6.5	6.0	6.0	5.5	5.0	4.5	---	---	7.0	6.0
10	9.0	7.5	6.5	6.0	6.0	5.5	4.5	4.0	---	---	7.0	6.0
11	9.0	7.5	6.5	5.5	5.5	5.0	4.5	4.0	---	---	6.5	5.5
12	8.5	7.5	6.5	5.5	5.5	5.0	5.0	4.5	---	---	6.5	5.5
13	9.0	7.5	6.5	5.5	5.5	5.0	5.0	5.0	---	---	6.5	5.5
14	8.5	8.0	6.5	5.5	5.5	5.0	5.5	5.0	---	---	6.0	5.0
15	8.5	8.0	6.5	5.5	5.5	5.0	5.5	5.0	---	---	6.0	5.0
16	8.5	7.5	6.5	6.5	5.5	5.0	5.5	5.0	---	---	6.5	5.5
17	8.5	7.5	7.0	6.0	6.0	5.5	5.5	5.0	---	---	6.0	5.5
18	8.0	7.5	6.0	5.5	6.0	6.0	---	---	---	---	6.5	5.5
19	8.0	7.5	6.5	5.5	6.0	6.0	---	---	---	---	6.5	6.0
20	7.5	7.0	6.0	5.5	6.0	6.0	---	---	---	---	6.5	5.5
21	8.0	7.0	6.0	5.0	6.0	5.5	---	---	---	---	6.0	5.5
22	7.5	7.0	6.0	5.5	5.5	5.0	---	---	---	---	7.0	6.0
23	8.0	7.5	6.0	5.5	5.0	5.0	---	---	---	---	6.5	6.0
24	8.0	7.5	6.0	5.5	5.5	5.0	---	---	---	---	7.0	5.5
25	8.0	7.5	6.0	5.5	5.5	5.0	---	---	---	---	7.5	5.5
26	8.0	7.5	6.0	5.5	5.5	5.0	---	---	6.5	6.5	6.5	5.5
27	8.0	7.5	5.5	5.0	5.5	5.0	---	---	7.0	6.5	6.5	5.5
28	7.5	7.0	5.5	5.0	5.5	5.0	---	---	7.0	6.5	7.0	5.5
29	8.0	7.0	5.5	5.0	5.5	5.0	---	---	7.0	6.0	6.5	5.5
30	7.5	7.0	6.0	5.5	5.5	5.0	---	---	---	---	7.0	5.5
31	7.5	7.0	---	---	5.5	5.5	---	---	---	---	6.5	5.5
MONTH	9.5	7.0	7.5	5.0	6.0	5.0	6.0	4.0	7.0	6.0	7.5	5.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.0	5.5	8.5	6.5	8.5	7.5	11.5	8.5	12.0	9.5	11.0	9.0
2	7.5	5.5	8.5	7.0	8.0	7.0	11.0	8.5	12.0	9.0	10.5	8.5
3	7.0	5.5	9.0	7.0	9.5	7.0	9.5	8.5	12.0	9.5	11.0	8.5
4	7.0	6.0	9.5	7.0	9.5	7.0	10.0	8.5	12.0	9.0	11.0	8.5
5	7.0	6.0	8.0	7.5	8.5	7.5	10.5	8.5	12.0	9.0	11.0	9.0
6	6.0	5.0	8.5	7.5	8.5	7.5	11.5	8.5	12.0	9.0	11.0	9.0
7	6.5	5.0	9.5	7.0	8.5	7.5	11.5	8.5	12.0	9.0	11.0	9.0
8	6.5	6.0	8.0	7.5	10.0	7.5	11.0	8.5	12.0	9.5	11.0	8.5
9	6.5	6.0	8.0	7.5	10.0	8.0	10.0	9.0	12.0	9.5	11.0	9.0
10	7.0	5.0	7.5	7.0	10.5	7.5	11.0	8.5	11.5	9.5	11.0	9.0
11	7.5	5.5	7.5	7.0	9.0	8.0	11.0	8.5	12.0	9.5	11.0	9.0
12	8.0	6.0	8.5	7.0	9.0	8.0	11.5	9.0	12.0	9.0	9.5	9.0
13	7.5	6.0	8.0	7.5	8.5	7.5	11.5	8.5	12.5	9.0	9.0	9.0
14	7.0	6.0	9.0	7.0	8.0	7.5	10.0	9.0	12.0	9.0	10.0	8.5
15	7.5	6.0	8.0	7.0	10.5	7.5	12.0	8.5	11.0	9.0	10.0	8.5
16	8.0	6.0	9.5	6.5	8.5	8.0	12.0	9.0	12.0	9.5	10.5	8.5
17	7.5	6.0	10.0	7.0	10.5	8.0	12.0	8.5	11.0	9.0	10.5	8.5
18	8.0	6.0	9.0	7.0	11.0	8.0	12.0	9.0	10.0	9.0	9.0	8.5
19	7.0	6.5	9.5	7.0	11.0	8.0	12.0	9.0	11.5	9.0	9.5	8.5
20	7.0	6.5	10.0	7.5	11.0	8.0	12.5	9.0	11.5	9.0	9.0	8.5
21	6.5	6.0	9.0	7.5	10.0	8.0	13.0	9.0	11.5	9.0	9.5	8.0
22	7.5	6.0	8.0	7.0	9.0	8.0	12.5	9.0	11.5	9.0	9.5	8.0
23	7.5	6.5	8.0	7.0	9.5	8.0	12.5	9.0	11.5	9.0	10.0	8.0
24	7.5	6.5	8.0	7.0	9.0	8.0	12.5	9.0	11.5	9.0	9.5	8.0
25	8.0	6.0	7.5	7.0	9.5	8.0	12.5	9.0	11.5	9.0	9.5	8.0
26	8.5	6.5	7.5	7.0	9.0	8.0	12.5	9.0	11.0	9.0	9.5	8.5
27	8.5	6.5	8.0	7.0	11.0	8.0	12.5	9.0	10.0	9.0	9.5	8.0
28	7.5	7.0	9.5	7.0	11.5	8.0	13.0	9.5	11.0	9.0	10.0	8.5
29	7.5	6.5	9.0	7.5	11.5	8.0	12.5	9.0	10.0	8.5	9.5	7.5
30	8.0	6.5	9.5	7.5	11.5	8.0	12.5	9.0	10.0	8.5	9.5	7.5
31	---	---	10.5	7.5	---	---	12.5	9.5	11.0	9.0	---	---
MONTH	8.5	5.0	10.5	6.5	11.5	7.0	13.0	8.5	12.5	8.5	11.0	7.5

14159200 SOUTH FORK MCKENZIE RIVER ABOVE COUGAR LAKE, NEAR RAINBOW, OR

LOCATION.--Lat 44°02'50", long 122°13'00", in T.17 S., R.5 E., (unsurveyed), Lane County, Hydrologic Unit 17090004, in Willamette National Forest, on right bank 100 ft (30 m) upstream from Tipsoo Creek, 8.0 mi (12.9 km) south of Rainbow, 9.0 mi (14.5 km) southeast of town of Blue River, and at mile 10.4 (16.7 km).

DRAINAGE AREA.--160 mi^2 (414 km^2) at cableway 0.2 mi (0.3 km) downstream, where all discharge measurements are made.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1957 to current year. Prior to October 1971, published as South Fork McKenzie River above Cougar Reservoir.

REVISED RECORDS.--WSP 1638: Drainage area. WSP 1935: 1958(M).

GAGE.--Water-stage recorder. Datum of gage is 1,709.51 ft (521.059 m) National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark).

REMARKS.--Water-discharge records good. No regulation or diversion above station. All records given herein are for measuring site.

AVERAGE DISCHARGE.--23 years, 636 ft^3/s (18.01 m^3/s), 53.98 in/yr (1,371 mm/yr), 460,800 acre-ft/yr (568 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,400 ft^3/s (521 m^3/s) Dec. 22, 1964, gage height, 20.06 ft (6.114 m), from floodmark, from rating curve extended above 7,600 ft^3/s (215 m^3/s), on basis of slope-area measurement of peak flow; minimum, 182 ft^3/s (5.15 m^3/s) Aug. 17-20, 22, 23, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,500 ft^3/s (70.8 m^3/s) and maximum discharge, 6,620 ft^3/s (187 m^3/s) Jan. 12, gage height, 11.74 ft (3.578 m); minimum, 184 ft^3/s (5.21 m^3/s) Oct. 9-13, Sept. 17, 27-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	191	476	462	472	522	684	452	739	476	309	217	198
2	191	399	1130	476	559	640	435	710	533	301	215	205
3	189	356	1450	504	874	628	422	689	597	293	212	205
4	189	422	1410	522	855	664	422	693	597	296	212	200
5	189	518	1290	1520	756	676	458	701	597	288	212	198
6	189	442	997	1320	800	664	511	680	604	283	210	196
7	189	383	823	981	770	632	483	636	672	275	210	198
8	189	347	714	846	718	600	608	593	624	265	207	189
9	189	322	660	774	672	562	907	608	574	265	207	191
10	187	304	761	710	624	536	911	616	529	270	207	191
11	187	288	648	664	585	551	823	616	493	260	207	189
12	187	278	600	3640	548	529	823	574	486	255	205	193
13	187	268	555	5740	518	624	1050	544	493	255	205	196
14	198	260	518	5010	497	986	1230	526	479	250	205	193
15	205	253	486	3150	472	796	1130	504	458	248	205	191
16	196	275	458	2180	458	668	1070	479	432	246	203	189
17	193	314	448	1800	465	652	1160	452	415	241	203	187
18	270	377	438	1430	486	664	1130	442	393	239	207	215
19	555	339	458	1170	507	644	1130	432	374	236	207	205
20	458	317	458	997	544	648	1280	425	359	234	205	225
21	368	306	518	869	507	616	1260	425	347	232	203	220
22	309	383	518	778	518	581	1060	448	342	232	203	203
23	356	497	490	718	540	562	960	432	359	229	200	198
24	342	1240	479	684	526	536	926	435	342	227	200	193
25	574	1020	455	648	540	518	878	465	393	225	200	191
26	432	735	428	608	640	529	874	490	387	225	198	189
27	383	593	409	551	660	518	911	551	362	222	198	189
28	353	510	393	515	731	493	966	533	342	220	198	189
29	333	458	380	483	739	493	902	500	328	220	200	187
30	368	452	374	469	---	483	796	472	320	217	198	187
31	624	---	380	455	---	469	---	452	---	215	200	---
TOTAL	8970	13132	19588	40684	17631	18846	25968	16862	13707	7773	6359	5900
MEAN	289	438	632	1312	608	608	866	544	457	251	205	197
MAX	624	1240	1450	5740	874	986	1280	739	672	309	217	225
MIN	187	253	374	455	458	469	422	425	320	215	198	187
CFSM	1.81	2.74	3.95	8.20	3.80	3.80	5.41	3.40	2.86	1.57	1.28	1.23
IN.	2.09	3.05	4.55	9.46	4.10	4.38	6.04	3.92	3.19	1.81	1.48	1.37
AC-FT	17790	26050	38850	80700	34970	37380	51510	33450	27190	15420	12610	11700

CAL YR 1979	TOTAL 206244	MEAN 565	MAX 2220	MIN 187	CFSM 3.53	IN 47.95	AC-FT 409100			
WTR YR 1980	TOTAL 195420	MEAN 534	MAX 5740	MIN 187	CFSM 3.34	IN 45.43	AC-FT 387600			

14159200 SOUTH FORK MCKENZIE RIVER ABOVE COUGAR LAKE, NEAR RAINBOW, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: November 1957 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 17.0°C July 8, 1968, July 19, 20, 1979; minimum, 0.0°C Dec. 7-11, 1972, Dec. 30, 1978, Jan. 1, 1979.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 16.0°C July 21, 22; minimum, 0.5°C Jan. 28-30.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	7.0	6.0	5.5	4.5	6.0	5.5	4.0	3.5	6.0	5.0
2	---	---	7.5	6.5	6.0	5.5	5.5	4.5	4.5	4.0	7.0	5.5
3	---	---	7.5	6.5	6.5	6.0	6.0	5.5	5.0	4.5	6.5	6.0
4	10.5	8.0	7.5	7.0	6.5	6.0	6.0	5.5	4.5	4.0	6.5	5.5
5	11.0	8.0	8.0	7.0	6.0	5.5	6.0	5.0	5.5	4.5	6.0	5.5
6	11.0	8.5	8.0	7.0	5.5	5.0	5.0	4.0	5.0	4.5	6.5	5.5
7	11.0	9.0	7.5	6.0	6.0	5.0	4.5	4.0	5.0	4.0	6.5	5.5
8	10.5	9.0	6.5	5.5	6.0	5.0	4.0	3.5	5.0	3.5	6.5	5.0
9	10.0	7.5	6.0	5.0	6.5	5.5	4.5	3.0	5.0	4.0	6.5	4.5
10	10.0	7.5	6.0	4.5	6.0	4.0	3.5	2.5	5.0	4.0	6.5	4.5
11	10.0	7.5	5.5	4.5	4.0	3.0	4.0	3.0	5.0	3.5	5.5	3.5
12	9.5	7.5	5.5	4.5	4.5	3.5	5.0	4.0	4.5	3.5	5.0	4.0
13	10.5	8.0	5.5	4.5	4.5	4.0	5.5	5.0	5.0	3.5	5.0	4.5
14	9.5	8.5	6.0	4.5	4.5	4.0	5.5	5.0	5.0	3.5	5.0	3.5
15	10.0	8.5	6.5	4.5	4.5	4.0	5.0	4.5	5.5	4.5	4.5	3.5
16	9.5	8.0	7.0	6.5	4.5	3.5	5.5	5.0	6.0	5.0	5.0	3.5
17	9.5	8.5	7.0	6.0	6.0	4.5	5.5	4.5	6.0	5.0	5.5	4.0
18	8.5	8.0	6.0	4.5	6.0	5.5	4.0	3.5	6.5	5.5	6.0	4.0
19	8.5	6.5	6.0	5.0	6.5	6.0	3.5	3.0	6.0	5.5	6.5	4.5
20	7.5	6.5	5.0	4.0	6.0	5.5	4.0	3.5	6.0	5.0	6.0	5.0
21	8.0	7.0	5.0	4.0	5.5	5.0	4.5	3.5	5.5	4.0	5.0	4.5
22	8.0	7.0	5.5	5.0	5.0	4.0	4.5	4.0	5.0	4.5	6.0	4.5
23	8.5	7.5	5.5	5.0	4.5	4.0	5.0	4.0	5.5	4.5	---	---
24	8.5	8.0	6.0	5.0	5.0	4.5	5.0	4.0	6.5	5.0	---	---
25	8.5	8.0	5.5	4.5	5.0	4.5	4.0	4.0	6.0	5.5	7.0	4.5
26	8.5	8.0	5.0	4.5	4.5	4.0	4.0	2.0	6.5	5.5	6.0	5.0
27	8.5	8.0	4.5	4.0	4.0	3.5	2.0	1.0	6.5	6.0	6.5	5.0
28	8.0	7.5	4.5	4.0	4.5	3.5	1.5	.5	6.5	5.5	7.0	4.5
29	8.0	7.0	5.0	4.0	5.0	4.5	1.0	.5	6.0	5.0	6.5	5.0
30	7.5	7.0	5.5	4.5	5.5	4.5	2.0	.5	---	---	6.5	5.0
31	8.0	7.0	---	---	6.0	5.0	3.5	---	---	---	6.0	5.0
MONTH	11.0	6.5	8.0	4.0	6.5	3.0	6.0	.5	6.5	3.5	7.0	3.5

14159200 SOUTH FORK MCKENZIE RIVER ABOVE COUGAR LAKE, NEAR RAINBOW, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.5	5.0	9.5	6.5	9.5	8.5	14.0	9.5	14.5	10.0	12.0	9.0
2	7.0	4.5	9.5	7.5	9.0	8.0	13.5	10.0	14.5	10.0	11.0	9.5
3	6.5	4.5	10.0	7.0	9.5	7.5	11.5	9.5	14.5	10.0	12.0	9.0
4	7.0	5.5	10.5	7.5	10.0	7.5	11.5	10.0	14.0	10.0	12.0	9.0
5	7.0	5.5	9.0	8.0	9.5	8.0	12.0	10.0	13.5	9.5	12.5	9.0
6	6.0	4.5	9.0	8.0	9.5	8.0	14.0	10.0	13.5	9.5	12.5	9.0
7	6.0	4.5	10.0	7.0	10.0	8.0	14.0	9.5	14.0	9.5	12.0	9.5
8	6.0	5.5	9.0	8.0	11.5	8.5	14.0	10.0	13.5	10.0	12.0	8.5
9	6.5	5.5	8.5	7.5	12.0	9.0	12.0	10.0	14.0	9.5	13.0	9.0
10	7.0	5.5	7.5	7.0	12.0	8.5	13.5	10.0	14.0	10.0	12.5	9.5
11	8.0	5.0	8.5	7.0	10.0	9.0	13.0	6.5	14.5	10.0	12.5	9.0
12	8.5	5.5	9.5	7.5	10.0	9.0	14.0	5.5	14.0	9.5	10.5	9.5
13	8.0	5.5	9.5	8.0	9.5	9.0	14.0	9.5	14.0	9.5	9.5	8.5
14	7.0	6.0	10.0	8.0	9.5	8.5	12.0	6.0	14.0	10.0	10.0	8.0
15	8.0	6.0	9.0	7.5	12.5	9.0	14.5	5.0	13.0	9.5	11.0	7.0
16	8.5	5.5	10.5	7.0	10.0	9.0	14.5	10.0	13.5	10.0	11.5	8.0
17	8.0	6.0	11.0	7.5	12.5	9.0	14.5	9.5	12.5	9.5	11.5	8.0
18	8.5	6.0	10.5	8.0	13.0	9.0	14.0	10.0	11.5	10.0	10.0	9.5
19	7.5	6.5	12.0	8.0	13.0	9.0	14.5	10.0	13.0	9.0	10.0	9.0
20	7.0	6.5	12.5	8.5	13.5	9.5	15.5	10.0	13.0	9.5	10.0	9.0
21	6.5	6.0	10.5	9.0	13.0	9.5	16.0	10.5	12.5	9.0	10.0	8.5
22	7.5	6.0	9.5	8.0	10.5	9.5	16.0	10.5	13.0	9.0	10.0	7.0
23	8.0	6.5	9.5	7.5	11.0	9.5	15.5	11.0	13.0	9.0	10.5	7.5
24	8.0	7.0	8.5	7.5	11.0	9.5	15.0	10.0	13.0	9.5	10.5	8.0
25	9.0	6.0	8.5	7.5	10.5	9.5	15.0	10.0	13.0	9.0	10.5	8.0
26	9.5	6.5	8.5	7.5	11.0	9.0	15.5	10.5	12.5	9.0	11.0	8.5
27	9.5	7.0	9.5	7.5	13.0	9.0	15.5	10.5	11.0	9.5	10.5	8.5
28	8.0	7.0	11.0	8.0	13.5	9.0	15.5	10.5	12.0	9.5	10.5	8.5
29	8.0	6.5	10.0	8.0	13.5	9.5	15.0	10.5	11.0	8.5	10.5	7.5
30	8.5	6.0	11.5	8.0	13.5	9.5	15.0	10.0	11.0	8.5	11.0	8.5
31	---	---	12.0	8.0	---	---	15.0	10.5	12.0	9.5	---	---
MONTH	9.5	4.5	12.5	6.5	13.5	7.5	16.0	5.0	14.5	8.5	13.0	7.0

14159400 COUGAR LAKE NEAR RAINBOW, OR

LOCATION.--Lat 44°07'40", long 122°14'25", in SE¼SE¼ sec.31, T.16 S., R.5 E., Lane County, Hydrologic Unit 17090004, Willamette National Forest, in intake tower near left end of Cougar Dam on South Fork McKenzie River, 2.7 mi (4.3 km) south of Rainbow, and at mile 4.5 (7.2 km).

DRAINAGE AREA.--207 mi² (536 km²).

PERIOD OF RECORD.--October 1963 to current year. Prior to October 1971, published as Cougar Reservoir near Rainbow.

GAGE.--Water-stage recorder. Datum gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by earthfill dam with concrete spillway completed in 1963 by the Corps of Engineers; storage began September 1963. Total capacity is 219,100 acre-ft (270 hm³) at elevation 1,699 ft (517.9 m), maximum pool, and usable capacity is 164,800 acre-feet (203 hm³) between elevations 1,516 ft (462.1 m), minimum power pool, and 1,699 ft (517.9 m). Reservoir used for flood control and power generation. Figures given herein represent total contents.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 214,100 acre-ft (264 hm³) June 29, 1977, elevation, 1,695.06 ft (516.654 m); minimum, 33,690 acre-ft (41.5 hm³) Oct. 31 to Nov. 2, 1965, elevation, 1,475.40 ft (449.702 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 210,700 acre-ft (260 hm³) June 8, elevation, 1,692.41 ft (515.847 m); minimum, 62,830 acre-ft (77.5 hm³) Dec. 6, 7, elevation, 1,530.30 ft (466.435 m).

Capacity table (elevation, in feet, and total contents, in acre-feet)

1,510	50,920	1,650	162,300
1,550	75,940	1,696	215,300
1,600	114,800		

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1602.37	1569.68	1540.42	1547.49	1562.30	1597.55	1635.57	1678.85	1692.24	1692.19	1689.27	1654.60
2	1601.62	1567.92	1538.30	1547.24	1561.10	1598.90	1636.23	1679.85	1692.30	1691.88	1688.28	1653.38
3	1600.88	1566.09	1535.82	1547.44	1561.45	1600.25	1636.88	1680.82	1692.41	1691.50	1687.26	1652.09
4	1600.10	1564.58	1532.94	1547.62	1562.50	1601.65	1637.57	1681.75	1692.29	1691.10	1686.29	1650.78
5	1599.35	1563.51	1530.84	1543.18	1564.50	1603.30	1638.29	1682.69	1692.29	1690.70	1685.28	1649.39
6	1598.57	1562.30	1530.30	1540.50	1567.00	1604.75	1639.18	1683.52	1692.30	1690.33	1684.25	1648.03
7	1597.80	1561.49	1530.62	1539.68	1569.15	1606.10	1640.12	1684.29	1692.30	1690.04	1683.28	1646.66
8	1597.03	1560.34	1531.47	1539.55	1561.15	1607.30	1641.20	1684.95	1692.41	1690.02	1682.26	1645.35
9	1596.30	1559.46	1532.52	1539.70	1562.65	1608.30	1643.38	1685.75	1692.29	1690.11	1681.21	1643.98
10	1595.50	1558.33	1533.22	1539.67	1564.10	1609.30	1645.58	1686.55	1692.08	1690.16	1680.19	1642.60
11	1594.70	1557.12	1534.65	1538.82	1565.35	1610.50	1647.40	1687.34	1692.03	1690.18	1679.12	1641.20
12	1593.90	1555.81	1536.21	1554.90	1566.45	1611.45	1649.20	1688.04	1692.03	1690.18	1678.04	1639.77
13	1593.08	1554.45	1537.98	1579.45	1567.50	1612.85	1651.64	1688.68	1692.00	1690.18	1676.95	1638.33
14	1592.35	1553.17	1540.00	1598.85	1568.40	1615.40	1654.61	1689.30	1692.00	1690.17	1675.87	1636.90
15	1591.30	1552.14	1542.18	1608.26	1579.20	1617.40	1657.20	1689.86	1692.03	1690.15	1674.78	1636.10
16	1590.60	1551.21	1544.56	1613.02	1580.00	1618.80	1659.53	1689.92	1692.03	1690.14	1673.68	1635.60
17	1588.80	1550.60	1546.98	1612.30	1580.80	1621.40	1662.10	1690.09	1692.03	1690.13	1672.56	1634.80
18	1587.60	1550.34	1549.60	1606.98	1581.65	1621.85	1664.45	1690.56	1691.96	1690.11	1671.46	1634.00
19	1587.71	1549.67	1551.04	1600.70	1582.65	1623.20	1666.78	1690.92	1691.94	1690.12	1670.35	1632.82
20	1586.64	1548.93	1550.82	1592.08	1583.80	1624.55	1669.50	1691.27	1692.00	1690.13	1669.15	1631.52
21	1585.23	1547.40	1549.66	1582.25	1585.05	1625.80	1671.63	1691.61	1692.00	1690.15	1668.00	1630.20
22	1583.31	1546.36	1548.79	1574.16	1586.10	1626.90	1672.65	1691.97	1692.06	1690.14	1666.80	1628.75
23	1581.75	1545.36	1548.22	1573.52	1587.25	1627.95	1673.35	1692.00	1692.17	1690.14	1665.67	1627.38
24	1579.96	1548.09	1547.98	1572.82	1588.30	1628.85	1674.01	1692.00	1692.17	1690.14	1664.48	1625.96
25	1579.30	1549.65	1547.84	1571.98	1589.45	1629.72	1674.67	1692.10	1692.29	1690.13	1663.26	1624.54
26	1577.85	1549.35	1547.82	1570.98	1591.00	1630.73	1675.34	1692.15	1692.04	1690.13	1662.08	1623.14
27	1576.38	1548.29	1547.88	1569.72	1592.55	1631.60	1676.11	1692.27	1692.10	1690.12	1660.85	1621.79
28	1574.69	1546.48	1547.94	1568.32	1594.35	1632.40	1677.00	1692.33	1692.20	1690.12	1659.64	1620.29
29	1572.83	1544.56	1547.92	1566.82	1596.05	1633.21	1677.75	1692.28	1692.23	1690.13	1658.38	1618.83
30	1571.50	1542.52	1547.90	1565.26	---	1633.93	1678.21	1692.30	1692.21	1690.12	1657.14	1617.42
31	1571.02	---	1547.84	1563.60	---	1634.75	---	1692.20	---	1690.00	1655.88	---
MEAN	1588.71	1554.17	1541.94	1568.29	1575.92	1617.76	1657.57	1688.33	1692.15	1690.35	1673.28	1636.21
MAX	1602.37	1569.68	1551.04	1613.02	1596.05	1634.75	1678.21	1692.33	1692.41	1692.19	1689.27	1654.60
MIN	1571.02	1542.52	1530.30	1538.82	1561.10	1597.55	1635.57	1678.85	1691.94	1690.00	1655.88	1617.42
(†)	91250	70810	74440	85680	111400	146800	193600	210500	210500	207800	168500	130300
(‡)	-26550	-20440	+3630	+11240	+25720	+35400	+46800	+16900	0	-2700	-39300	-38200

CAL YR 1979 MEAN 1620.76 MAX 1692.50 MIN 1521.76 AC-FT‡ +10790
WTR YR 1980 MEAN 1623.86 MAX 1692.41 MIN 1530.30 AC-FT‡ +12500

† Contents, in acre-feet, at 2400, on last day of month.
‡ Change in contents, in acre-feet.

14159500 SOUTH FORK MCKENZIE RIVER NEAR RAINBOW, OR

LOCATION.--Lat 44°08'10", long 122°14'50", in NE¼ sec.31, T.16 S., R.5 E., Lane County, Hydrologic Unit 17090004, in Willamette National Forest, on right bank 0.2 mi (0.3 km) upstream from Cougar Creek, 0.6 mi (1.0 km) downstream from Cougar Dam, 2.1 mi (3.4 km) south of Rainbow, and at mile 3.9 (6.3 km).

DRAINAGE AREA.--208 mi² (539 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1947 to current year.

REVISED RECORDS.--WSP 1638: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,236.42 ft (376.861 m) National Geodetic Vertical Datum of 1929 (Bureau of Public Roads bench mark). Oct. 1 to Nov. 4, 1947, nonrecording gage at site 40 ft (12 m) upstream at datum 0.80 ft (0.244 m) higher.

REMARKS.--Water-discharge records good. Flow regulated since 1963 by Cougar Lake (see station 14159400), usable capacity, 165,000 acre-ft (203 hm³). No diversion above station.

AVERAGE DISCHARGE.--33 years, 871 ft³/s (24.67 m³/s), 56.87 in/yr (1,444 mm/yr), 631,000 acre-ft/yr (778 hm³/yr), adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,600 ft³/s (498 m³/s) Dec. 11, 1956, gage height, 8.66 ft (2.640 m), from rating curve extended above 8,100 ft³/s (229 m³/s); maximum gage height, 8.90 ft (2.713 m) Dec. 22, 1955 (backwater from debris); minimum discharge, 17 ft³/s (0.48 m³/s) Nov. 18, 1965; minimum daily, 85 ft³/s (2.41 m³/s) Apr. 26-28, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 24,500 ft³/s (694 m³/s) Dec. 28, 1945, gage height, 8.8 ft (2.68 m), from floodmarks, at Corps of Engineers gage at site 40 ft (12 m) upstream at datum 0.80 ft (0.244 m) higher; gage height at present site and datum, about 9.3 ft (2.83 m), computed by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,220 ft³/s (148 m³/s) Jan. 20, gage height, 4.85 ft (1.478 m); minimum, 74 ft³/s (2.10 m³/s) Apr. 1; minimum daily, 209 ft³/s (5.92 m³/s) Jan. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	620	1050	1210	501	1100	300	239	501	589	440	490	804
2	468	1050	1220	524	1130	300	243	300	614	565	540	812
3	462	1070	1250	691	1120	300	239	305	726	608	540	820
4	462	1070	1230	712	865	300	228	305	748	596	540	820
5	462	1080	1190	892	358	305	292	305	772	596	540	820
6	462	883	1190	1010	300	300	296	305	796	596	565	820
7	462	733	1180	1070	300	281	235	305	796	490	764	782
8	462	726	1180	1110	300	300	300	305	788	336	764	838
9	456	712	1190	1100	300	300	305	300	788	305	772	847
10	462	712	1190	1110	300	300	300	300	740	309	764	847
11	468	712	1240	1110	300	305	296	305	639	331	772	817
12	468	712	1230	772	300	300	296	305	608	331	772	796
13	468	712	1210	228	300	300	300	305	639	331	780	796
14	473	670	1230	209	296	300	300	305	627	336	772	804
15	583	620	1230	620	292	296	300	305	583	322	780	519
16	639	614	1240	980	288	296	305	529	558	318	780	404
17	639	614	1250	2630	295	300	300	424	565	314	780	531
18	651	620	1260	3990	305	300	296	300	524	296	788	577
19	874	620	940	4010	305	296	300	296	496	288	788	668
20	1000	620	484	4630	296	300	300	296	440	285	788	785
21	1000	719	366	4970	235	300	565	300	404	285	788	785
22	1000	812	404	3850	296	300	788	344	404	285	796	772
23	1000	960	456	1080	296	300	796	496	419	281	796	764
24	1010	1130	512	1070	305	300	796	529	424	285	796	764
25	1010	1130	518	1070	300	296	740	529	565	281	796	763
26	1020	1130	524	1070	300	300	698	602	620	281	796	762
27	1020	1130	518	1080	300	300	698	645	414	262	796	765
28	1020	1190	496	1090	300	300	698	691	434	254	796	765
29	1020	1200	456	1080	300	300	698	670	434	269	804	764
30	1040	1200	456	1090	---	300	698	602	440	277	804	755
31	1050	---	451	1100	---	247	---	571	---	327	804	---
TOTAL	22231	26201	28501	46449	11683	9222	12845	12580	17594	11080	22851	22566
MEAN	717	873	919	1498	403	297	428	406	586	357	737	752
MAX	1050	1200	1260	4970	1130	305	796	691	796	608	804	847
MIN	456	614	366	209	235	247	228	296	404	254	490	404
AC-FT	44100	51970	56530	92130	23170	18290	25480	24950	34900	21980	45320	44760
MEAN†	285	530	978	1681	850	873	1215	681	587	314	95	110
CFSM†	1.37	2.55	4.70	8.08	4.09	4.20	5.84	3.27	2.82	1.51	.46	.53
IN.†	1.58	2.84	5.42	9.32	4.41	4.84	6.52	3.77	3.15	1.74	.52	.59
AC-FT†	17550	31530	60160	103370	48890	53690	72280	41850	34900	19280	5820	6560

CAL YR 1979 TOTAL 257361 MEAN 705 MAX 2300 MIN 220 AC-FT 510500 MEAN† 720 CFSM† 3.46 IN.† 47.00 AC-FT† 521290
WTR YR 1980 TOTAL 243803 MEAN 666 MAX 4970 MIN 209 AC-FT 483600 MEAN† 683 CFSM† 3.28 IN.† 44.73 AC-FT† 496100

† Adjusted for change in contents in Cougar Lake.

14159500 SOUTH FORK MCKENZIE RIVER NEAR RAINBOW, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: July 1955 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 20.0°C July 28, 1958; minimum, 0.5°C Jan. 20-23, 1962.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 14.5°C Oct. 2, 4, 5, 8, 9; minimum, 3.5°C Jan. 27-30.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	14.0	13.0	12.5	11.5	7.0	6.5	7.5	7.0	4.0	4.0	5.5	5.0
2	14.5	13.5	12.0	11.5	7.5	6.5	7.0	6.5	4.0	4.0	6.0	5.0
3	14.0	13.5	12.0	11.5	7.5	7.0	7.0	7.0	4.5	4.0	5.5	5.0
4	14.5	13.5	12.0	11.5	7.0	7.0	7.0	7.0	5.0	4.0	5.5	5.0
5	14.5	13.5	11.5	11.0	7.0	6.5	7.5	6.5	5.0	4.5	5.5	5.0
6	14.0	13.5	11.0	11.0	7.0	6.5	6.5	6.0	5.0	5.0	5.5	5.0
7	14.0	13.5	11.5	10.5	7.0	6.5	6.5	6.0	5.0	5.0	7.0	5.0
8	14.5	13.5	11.0	10.5	7.5	7.0	6.5	6.0	5.5	4.5	5.5	5.0
9	14.5	13.0	11.0	10.5	7.5	7.0	6.5	6.0	5.5	5.0	6.0	4.5
10	14.0	13.5	11.0	10.5	7.5	6.5	6.0	6.0	5.5	5.0	5.0	4.5
11	14.0	13.0	11.0	10.5	6.5	6.5	6.0	5.5	6.0	5.0	5.0	4.5
12	14.0	13.5	10.5	10.0	7.0	6.5	8.0	6.0	6.0	5.0	5.5	4.5
13	14.0	13.5	10.5	10.0	7.0	6.5	8.0	7.5	6.0	5.0	5.5	5.0
14	14.0	13.5	10.0	10.0	7.0	6.5	8.0	7.5	5.5	5.0	5.0	4.5
15	14.0	13.5	10.0	9.5	7.0	6.5	7.0	6.5	6.0	5.0	6.0	5.0
16	14.0	13.5	10.0	9.5	7.0	6.5	7.0	6.5	5.5	5.0	6.0	4.5
17	14.0	13.5	9.5	9.0	7.5	6.5	7.0	6.5	5.5	5.0	5.0	4.5
18	13.5	13.5	9.0	9.0	7.5	7.0	6.5	5.0	5.5	5.0	6.0	5.0
19	14.0	13.5	9.0	8.5	7.5	7.0	5.5	5.0	5.5	5.0	6.0	5.0
20	14.0	13.5	9.0	8.5	7.5	7.0	5.5	5.0	6.0	5.0	5.5	5.0
21	14.0	13.0	9.0	8.5	7.5	6.5	5.5	5.0	6.5	5.0	5.5	5.0
22	13.5	13.0	9.0	8.5	6.5	6.5	5.5	5.0	5.5	5.5	5.5	5.0
23	13.5	13.0	8.5	8.5	6.5	6.0	5.5	5.0	6.0	5.5	6.0	4.5
24	13.0	13.0	8.5	8.0	7.0	6.5	5.5	5.0	6.5	6.0	6.0	4.5
25	13.0	12.5	8.0	7.5	7.0	6.5	5.5	5.5	6.5	6.0	6.0	4.5
26	13.0	12.5	7.5	7.0	6.5	6.5	5.5	4.5	6.5	6.0	5.0	4.5
27	13.0	12.5	7.5	7.0	6.5	6.0	4.0	3.5	6.5	5.5	5.5	4.5
28	12.5	12.5	7.0	6.5	6.5	6.0	4.0	3.5	5.5	5.0	5.5	4.5
29	12.5	12.0	7.0	6.5	7.0	6.5	4.0	3.5	6.5	5.0	5.0	4.5
30	12.5	12.0	6.5	6.5	7.0	6.5	4.5	3.5	---	---	5.5	4.5
31	12.5	12.0	---	---	7.0	7.0	4.0	4.0	---	---	6.5	4.5
MONTH	14.5	12.0	12.5	6.5	7.5	6.0	8.0	3.5	6.5	4.0	7.0	4.5

14159500 SOUTH FORK MCKENZIE RIVER NEAR RAINBOW, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.0	4.5	6.5	5.0	6.5	5.5	---	---	8.5	6.5	10.0	8.5
2	9.5	4.5	6.5	5.0	6.0	6.0	---	---	8.5	7.0	10.0	9.0
3	7.0	4.5	6.5	5.0	6.5	6.0	---	---	8.5	7.0	10.0	9.5
4	6.5	4.5	6.5	5.0	6.5	5.5	---	---	8.5	7.0	10.0	9.5
5	5.5	4.5	6.0	5.0	6.5	5.5	---	---	8.5	7.0	10.5	9.5
6	5.0	4.5	6.0	5.0	6.5	6.0	---	---	8.5	7.5	10.5	9.5
7	6.5	4.5	6.5	5.0	6.5	5.5	---	---	8.5	7.0	10.5	9.0
8	5.5	5.0	6.0	5.0	6.5	6.0	---	---	8.5	7.0	10.5	9.5
9	5.5	5.0	5.5	5.0	6.5	6.0	7.5	6.5	8.5	7.5	11.0	9.0
10	5.5	5.0	5.5	5.0	6.5	6.0	8.0	6.5	8.5	7.0	10.5	9.0
11	6.0	4.5	5.5	5.0	6.5	5.5	8.5	6.5	9.0	7.0	10.5	10.0
12	6.5	5.0	6.0	5.0	6.5	5.5	8.0	6.0	9.0	7.5	10.5	9.5
13	5.5	5.0	6.0	5.0	6.5	6.0	8.5	6.5	9.0	7.0	10.5	10.0
14	5.0	5.0	6.5	5.0	6.5	6.0	7.5	6.0	9.0	7.5	11.0	10.0
15	6.0	4.5	6.5	5.0	6.5	---	8.5	6.0	9.0	8.0	10.5	9.5
16	6.0	5.0	6.0	5.0	6.5	---	8.5	6.0	9.0	7.0	11.0	9.0
17	5.5	5.0	7.0	5.0	6.5	---	8.5	6.5	9.0	7.5	10.5	9.0
18	6.0	5.0	6.5	5.0	---	---	8.5	6.0	9.0	7.5	10.5	9.5
19	5.5	5.0	7.0	5.0	---	---	9.0	6.0	9.0	8.0	11.0	10.0
20	5.0	5.0	6.5	5.5	---	---	9.0	6.0	9.5	7.5	11.0	10.5
21	5.5	5.0	6.5	5.5	---	---	9.0	6.5	9.5	7.5	11.5	11.0
22	5.5	5.0	6.0	5.5	---	---	8.5	6.5	9.5	8.0	11.5	10.5
23	5.5	5.0	6.0	5.5	---	---	9.0	6.5	9.5	8.0	11.5	11.0
24	5.5	5.0	6.0	5.5	---	---	9.0	6.0	9.5	8.0	11.5	11.0
25	5.5	5.0	6.0	5.5	---	---	9.0	6.0	9.5	8.0	12.0	11.5
26	5.5	5.0	6.0	5.5	---	---	9.0	6.0	9.5	8.5	12.0	11.5
27	5.5	5.0	6.0	5.5	---	---	9.0	6.5	9.5	8.0	12.5	11.5
28	5.5	5.0	6.0	5.5	---	---	9.5	6.5	10.0	8.0	12.5	11.5
29	5.5	5.0	6.0	5.5	---	---	9.0	6.5	9.5	9.0	12.5	12.0
30	6.0	5.0	6.5	5.5	---	---	9.5	6.5	10.0	8.0	12.5	12.0
31	---	---	6.5	5.5	---	---	9.5	6.5	10.0	8.0	---	---
MONTH	9.5	4.5	7.0	5.0	6.5	5.5	9.5	6.0	10.0	6.5	12.5	8.5

14161100 BLUE RIVER BELOW TIDBITS CREEK, NEAR BLUE RIVER, OR

LOCATION.--Lat 44°13'05", long 122°15'50", in SE¼NE¼ sec.36, T.15 S., R.4 E., Lane County, Hydrologic Unit 17090004, in Willamette National Forest, on left bank 0.2 mi (0.3 km) downstream from Tidbits Creek, 5.5 mi (8.8 km) northeast of town of Blue River, and at mile 8.5 (13.7 km).

DRAINAGE AREA.--45.8 mi^2 (118.6 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,386.90 ft (422.727 m) National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark).

REMARKS.--Water-discharge records good. No regulation or diversion above station.

AVERAGE DISCHARGE.--17 years, 259 ft^3/s (7.335 m^3/s), 76.80 in/yr (1,951 mm/yr), 187,600 acre-ft/yr (231 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,400 ft^3/s (351 m^3/s) Dec. 22, 1964, gage height, 15.32 ft (4.670 m), from floodmarks, from rating curve extended above 2,800 ft^3/s (79.3 m^3/s) on basis of slope-area measurement of peak flow; minimum, 8.2 ft^3/s (0.23 m^3/s) Sept. 28, 29, Oct. 2-4, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,000 ft^3/s (56.6 m^3/s) and maximum discharge, 5,630 ft^3/s (159 m^3/s) Jan. 12, gage height, 9.67 ft (2.947 m); minimum, 9.1 ft^3/s (0.26 m^3/s) Oct. 9-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	184	203	502	210	330	167	141	110	61	24	17
2	10	126	1610	401	307	273	156	132	121	59	24	22
3	9.9	100	1280	371	520	245	150	122	156	57	24	21
4	9.6	217	1130	348	429	299	156	119	143	59	23	17
5	9.6	313	858	1120	327	330	217	115	136	56	23	17
6	9.6	201	516	697	459	322	268	107	137	52	23	16
7	9.6	146	358	444	463	270	228	97	146	50	23	16
8	9.3	116	273	351	358	231	316	90	137	50	22	16
9	9.3	97	240	371	297	203	693	100	124	46	22	16
10	9.1	83	291	319	253	182	644	110	112	44	21	15
11	9.1	73	226	268	217	186	505	109	103	43	20	14
12	9.1	66	199	2680	192	178	487	101	96	41	20	14
13	9.1	61	178	3370	172	268	627	93	99	39	20	15
14	13	57	170	2860	159	505	684	87	92	38	20	15
15	15	53	165	1460	146	345	623	82	89	38	20	14
16	12	66	152	874	137	253	505	79	82	37	20	14
17	11	129	146	729	134	240	498	74	78	36	19	14
18	66	214	139	513	163	281	426	69	73	36	20	18
19	286	159	176	381	281	278	401	67	71	34	21	19
20	197	139	233	307	313	283	408	65	66	33	19	28
21	137	121	345	255	265	276	384	63	63	32	18	30
22	86	289	345	226	240	238	302	65	61	31	17	21
23	97	444	281	210	270	231	260	73	63	30	17	18
24	79	1100	276	208	265	212	248	75	61	29	17	17
25	219	715	258	195	268	199	233	121	83	28	17	16
26	167	415	228	172	459	208	219	174	85	27	17	15
27	152	291	199	150	437	212	221	240	82	26	16	15
28	124	228	178	134	429	197	219	186	74	25	16	14
29	104	184	167	124	415	192	186	148	68	25	16	14
30	131	180	165	119	---	192	157	127	65	25	16	14
31	384	---	190	113	---	182	---	112	---	25	16	---
TOTAL	2403.3	6567	11175	20272	8585	7841	10588	3343	2876	1212	611	512
MEAN	77.5	219	360	654	296	253	353	108	95.9	39.1	19.7	17.1
MAX	384	1100	1610	3370	520	505	693	240	156	61	24	30
MIN	9.1	53	139	113	134	178	150	63	61	25	16	14
CFSM	1.69	4.78	7.86	14.3	6.46	5.52	7.71	2.36	2.09	.85	.43	.37
IN.	1.95	5.33	9.08	16.47	6.97	6.37	8.60	2.72	2.34	.98	.50	.42
AC-FT	4770	13030	22170	40210	17030	15550	21000	6630	5700	2400	1210	1020

CAL YR 1979 TOTAL 79327.3 MEAN 217 MAX 2010 MIN 9.1 CFSM 4.74 IN 64.43 AC-FT 157300
WTR YR 1980 TOTAL 75985.3 MEAN 208 MAX 3370 MIN 9.1 CFSM 4.54 IN 61.72 AC-FT 150700

14161100 BLUE RIVER BELOW TIDBITS CREEK, NEAR BLUE RIVER, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: September 1963 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 23.0°C Aug. 3, 4, 1974, July 20, 1979; minimum, 0.0°C on several days in 1969, 1971-74, 1976, 1979-80.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 21.0°C July 21-23, 27, 28; minimum, 0.0°C Jan. 27-31.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	14.5	11.5	8.0	6.5	7.0	5.0	8.0	6.5	2.5	1.5	7.0	5.5
2	15.0	11.5	9.0	7.0	8.5	6.5	7.5	6.0	4.0	2.5	8.5	6.5
3	14.0	11.0	9.0	7.0	8.5	8.0	8.0	6.5	5.5	4.0	6.5	6.0
4	14.0	11.5	8.5	7.5	8.5	6.0	8.0	7.0	5.0	4.0	---	---
5	14.5	---	9.0	7.5	7.5	6.0	8.0	6.0	5.5	4.5	---	---
6	14.5	12.5	9.0	7.5	7.0	5.0	6.0	4.5	5.5	5.0	---	---
7	15.0	13.0	8.5	7.0	7.5	5.5	5.5	4.5	5.5	4.0	---	---
8	15.5	13.5	8.0	5.5	8.0	6.0	4.5	3.0	5.5	3.5	---	---
9	14.0	12.0	7.5	5.0	8.0	6.5	5.0	4.0	5.5	3.5	---	---
10	13.5	10.5	6.5	5.0	7.5	5.0	4.0	3.5	6.0	4.0	---	---
11	13.5	10.5	6.0	4.5	5.0	3.5	4.0	3.0	5.0	3.0	---	---
12	13.0	11.0	6.0	4.5	5.0	4.0	6.5	4.0	5.0	3.0	---	---
13	13.5	11.0	6.0	4.5	6.0	4.5	7.5	6.5	5.5	3.5	---	---
14	13.0	12.5	6.0	4.5	7.0	5.5	7.5	7.0	5.0	3.5	---	---
15	14.0	12.5	6.5	4.0	6.0	5.0	7.5	6.0	5.5	3.5	---	---
16	13.5	12.0	8.0	6.5	6.0	4.5	7.5	6.0	6.0	4.5	---	---
17	13.0	11.0	8.5	6.0	8.0	5.5	7.0	5.5	6.5	4.5	---	---
18	11.5	10.0	6.0	4.5	8.5	7.5	5.5	4.0	7.0	5.5	---	---
19	10.0	8.0	6.0	5.0	8.5	8.0	4.0	3.0	6.5	5.0	---	---
20	9.0	7.5	5.0	4.0	8.0	7.5	5.0	3.0	6.0	5.0	---	---
21	9.0	7.0	5.0	3.5	7.5	5.0	5.0	4.0	6.0	4.0	---	---
22	9.0	7.5	6.0	4.5	6.0	4.0	5.5	4.0	5.0	3.5	---	---
23	10.5	8.5	6.0	5.5	4.5	4.0	6.0	4.0	6.0	4.0	---	---
24	10.0	9.0	7.0	5.0	5.5	4.5	6.0	4.0	7.5	5.0	---	---
25	10.0	9.5	6.0	5.0	6.5	5.5	5.5	4.5	6.5	5.5	6.5	4.0
26	10.0	9.0	5.5	4.5	6.0	5.5	5.0	2.0	7.0	6.5	5.0	4.5
27	10.5	8.5	5.5	4.5	5.5	4.5	2.0	.0	8.0	7.0	6.0	4.0
28	9.5	7.5	5.0	4.0	5.5	4.0	.0	.0	7.0	6.5	6.5	3.5
29	9.0	7.0	5.5	4.5	6.0	5.0	.0	.0	7.0	5.5	6.0	4.5
30	9.0	7.0	6.5	5.0	7.0	5.5	.0	.0	---	---	6.5	4.0
31	9.0	6.5	---	---	7.0	6.0	2.0	.0	---	---	5.5	4.0
MONTH	15.5	6.5	9.0	3.5	8.5	3.5	8.0	.0	8.0	1.5	8.5	3.5

14161100 BLUE RIVER BELOW TIDBITS CREEK, NEAR BLUE RIVER, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.0	4.5	11.0	6.5	11.0	9.0	16.5	12.0	20.0	16.0	16.0	12.0
2	6.5	4.0	10.5	8.0	9.0	7.5	17.0	13.0	19.5	15.0	15.0	13.5
3	6.0	3.5	11.5	7.0	9.5	7.0	14.5	13.0	19.5	15.0	15.0	11.0
4	6.5	4.5	13.0	8.5	10.0	6.5	13.5	11.5	19.0	14.5	15.5	11.5
5	6.5	5.0	10.5	9.5	9.5	7.5	14.0	12.0	18.0	14.5	16.0	12.5
6	5.5	3.0	10.0	9.0	9.5	8.0	16.0	12.0	17.5	13.0	16.0	13.0
7	5.5	3.0	11.5	7.0	10.5	8.0	17.5	12.5	18.5	13.5	16.5	14.5
8	5.5	4.5	10.0	8.5	13.0	9.0	17.0	13.5	18.0	14.5	16.0	12.5
9	6.0	5.0	9.5	8.0	13.0	10.0	15.5	14.0	19.0	14.5	16.5	13.0
10	6.5	4.5	8.0	7.0	13.5	9.5	17.0	13.0	19.0	15.0	17.0	14.0
11	8.0	4.5	8.5	7.0	11.5	10.0	16.0	12.5	19.5	15.5	16.5	13.5
12	8.5	5.0	9.5	7.5	11.0	9.5	17.0	14.0	19.0	15.0	14.5	13.5
13	8.0	5.0	9.5	8.0	10.0	9.5	17.0	13.0	19.0	15.0	13.5	12.0
14	6.5	5.5	10.0	8.0	9.5	9.0	15.5	14.5	19.0	15.0	14.5	11.5
15	8.0	5.5	9.5	7.0	14.0	9.0	18.0	13.0	17.0	14.0	14.0	11.0
16	8.5	5.0	10.5	6.0	12.0	10.5	18.5	14.0	18.5	14.5	14.5	11.0
17	7.5	5.5	12.0	7.0	14.0	9.5	18.5	14.0	17.0	14.0	14.5	11.5
18	8.5	5.0	12.0	8.5	15.0	10.5	18.5	14.5	16.0	14.5	13.5	12.5
19	7.5	6.5	13.5	9.0	15.0	10.5	19.0	14.0	17.0	12.0	13.5	12.5
20	7.0	6.0	14.5	10.0	16.0	12.0	20.0	15.0	17.0	13.0	13.0	12.0
21	6.0	5.5	12.5	11.0	15.0	12.0	21.0	16.0	17.0	12.5	13.5	11.5
22	7.0	5.5	11.0	8.5	13.5	12.0	21.0	17.0	17.0	12.5	13.0	9.5
23	8.0	6.5	10.0	7.5	13.5	11.0	21.0	17.0	17.0	13.0	13.5	10.0
24	8.5	6.5	8.5	7.5	13.0	11.0	20.0	15.5	17.5	13.5	13.5	10.5
25	9.5	5.5	8.5	7.0	12.5	10.5	20.0	15.0	17.0	13.0	14.0	10.5
26	11.0	7.0	7.5	6.5	11.5	9.5	20.5	15.5	16.5	13.5	14.0	11.5
27	11.5	7.5	8.5	7.0	14.0	9.5	21.0	16.0	15.5	14.5	13.0	11.5
28	9.5	8.0	11.0	7.5	15.5	10.5	21.0	16.5	16.0	13.5	14.0	12.0
29	9.0	6.5	9.5	7.5	15.5	11.0	20.5	16.0	14.0	12.0	13.5	11.5
30	9.5	5.5	12.0	8.0	16.0	11.0	20.0	15.5	14.0	11.5	14.0	12.0
31	---	---	13.0	8.5	---	---	20.5	16.5	16.0	13.0	---	---
MONTH	11.5	3.0	14.5	6.0	16.0	6.5	21.0	11.5	20.0	11.5	17.0	9.5

14161500 LOOKOUT CREEK NEAR BLUE RIVER, OR

LOCATION.--Lat 44°12'35", long 122°15'20", in T.15 or 16 S., R.5 E. (unsurveyed), Lane County, Hydrologic Unit 17090004, in Willamette National Forest, on left bank 6.0 mi (9.7 km) northeast of town of Blue River, and at mile 0.5 (0.8 km).

DRAINAGE AREA.--24.1 mi^2 (62.4 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1949 to September 1955, September 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,377.76 ft (419.941 m) National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark).

REMARKS.--Water-discharge records good. No regulation or diversion above station.

AVERAGE DISCHARGE.--23 years, 127 ft^3/s (3.597 m^3/s), 71.56 in/yr (1,818 mm/yr), 92,010 acre-ft/yr (113 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,660 ft^3/s (189 m^3/s) Dec. 22, 1964, gage height, 8.88 ft (2.707 m), from rating curve extended above 1,300 ft^3/s (36.8 m^3/s), on basis of slope-area measurement of peak flow; minimum, 6.4 ft^3/s (0.18 m^3/s) Nov. 25-30, 1952.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,000 ft^3/s (28.3 m^3/s) and maximum discharge, 1,560 ft^3/s (44.2 m^3/s) Jan. 12, gage height, 5.81 ft (1.771 m); minimum, 7.2 ft^3/s (0.20 m^3/s) Oct. 9-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.2	90	95	119	138	154	89	101	62	35	20	13
2	8.6	70	353	112	138	136	85	95	64	34	20	17
3	8.1	56	423	125	211	127	82	90	67	33	20	16
4	7.6	90	419	127	199	140	81	86	64	35	20	14
5	7.6	114	343	404	172	152	87	82	62	33	19	13
6	8.1	90	245	295	204	150	97	79	64	31	19	12
7	8.1	72	193	216	199	136	97	73	70	30	19	12
8	8.1	61	158	193	176	123	140	67	65	28	19	12
9	7.6	52	145	211	156	112	232	76	61	28	18	11
10	7.2	46	154	191	138	106	251	81	58	27	18	11
11	7.2	42	125	161	123	107	224	77	54	26	17	11
12	7.6	39	114	928	112	104	209	72	52	26	17	12
13	7.6	36	104	1370	104	140	237	67	55	25	16	13
14	13	35	98	1220	98	237	274	64	55	25	16	12
15	14	33	93	679	91	191	265	61	53	24	15	11
16	11	40	86	434	89	152	240	58	50	23	15	11
17	11	51	85	343	89	145	240	53	48	22	15	11
18	39	87	81	265	94	156	221	51	45	22	17	16
19	104	75	91	216	119	152	219	49	43	22	16	15
20	86	65	97	184	119	150	237	47	42	22	15	20
21	59	56	129	158	109	138	224	46	40	21	15	19
22	42	93	143	140	111	127	184	52	39	21	14	15
23	42	140	125	127	127	119	165	53	39	20	14	13
24	39	370	123	121	121	111	161	52	39	20	13	13
25	64	274	114	114	123	104	152	59	50	19	13	12
26	58	191	104	106	167	106	147	71	46	19	13	12
27	62	145	95	95	167	106	152	90	43	19	13	11
28	56	115	87	93	176	101	150	83	40	19	13	11
29	49	97	82	87	172	100	127	77	39	20	13	11
30	60	95	78	81	---	97	109	71	36	21	13	11
31	145	---	78	76	---	93	---	64	---	21	14	---
TOTAL	1056.6	2820	4660	8991	4042	4072	5178	2147	1545	771	499	391
MEAN	34.1	94.0	150	290	139	131	173	69.3	51.5	24.9	16.1	13.0
MAX	145	370	423	1370	211	237	274	101	70	35	20	20
MIN	7.2	33	78	76	89	93	81	46	36	19	13	11
CFSM	1.42	3.90	6.22	12.0	5.77	5.44	7.18	2.88	2.14	1.03	.67	.54
IN.	1.63	4.35	7.19	13.88	6.24	6.29	7.99	3.31	2.38	1.19	.77	.60
AC-FT	2100	5590	9240	17830	8020	8080	10270	4260	3060	1530	990	776

CAL YR 1979 TOTAL 36210.0 MEAN 99.2 MAX 792 MIN 7.2 CFSM 4.12 IN 55.89 AC-FT 71820
WTR YR 1980 TOTAL 36172.6 MEAN 98.8 MAX 1370 MIN 7.2 CFSM 4.10 IN 55.83 AC-FT 71750

14161500 LOOKOUT CREEK NEAR BLUE RIVER, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: August 1950 to September 1955, September 1963 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 22.0°C Aug. 8, 1978; minimum, 0.0°C on several days in 1969, 1977 to 1980.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 20.5°C July 21, 22, 27, 28; minimum, 0.0°C Jan. 28.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	14.5	11.5	8.0	6.5	6.5	5.0	7.0	6.0	3.5	2.5	7.0	5.5
2	14.0	11.5	8.5	7.5	7.0	6.0	7.0	5.0	4.5	3.5	8.0	6.5
3	14.0	11.5	8.5	7.5	7.5	7.0	8.0	5.0	5.5	4.5	7.5	6.5
4	14.0	11.5	8.5	8.5	7.5	7.0	7.0	6.5	5.5	5.0	7.5	6.5
5	14.5	12.0	9.0	8.0	7.0	6.0	7.0	5.5	6.0	5.0	7.0	6.0
6	14.0	12.5	9.0	7.5	6.5	6.0	5.5	5.0	6.0	5.5	7.0	5.5
7	15.0	13.0	8.0	7.0	6.5	5.5	5.5	4.0	6.0	5.0	---	---
8	15.0	13.5	7.5	6.5	7.0	6.0	5.0	3.5	6.0	4.5	---	---
9	14.0	12.0	7.0	6.0	7.0	6.0	5.0	4.5	6.0	4.5	---	---
10	13.5	11.0	6.5	5.5	7.0	5.0	4.5	4.0	6.5	5.0	---	---
11	13.5	11.0	6.0	5.0	5.0	4.0	4.5	3.5	5.5	4.0	---	---
12	13.5	11.0	6.0	5.0	5.0	4.5	5.0	4.5	5.5	4.0	---	---
13	13.5	11.5	6.0	5.0	5.5	4.5	5.5	4.5	6.0	4.5	---	---
14	13.0	12.5	6.0	5.0	6.0	5.0	6.0	5.0	5.5	4.5	---	---
15	14.0	12.0	6.5	4.5	6.0	5.0	6.0	5.5	6.5	5.0	---	---
16	13.0	11.5	7.5	6.5	5.5	4.5	6.5	5.0	7.0	5.0	---	---
17	12.5	11.0	8.0	7.0	6.5	5.5	6.0	5.0	7.0	5.0	---	---
18	11.5	10.0	7.0	5.5	7.0	6.5	5.0	4.0	7.0	6.5	---	---
19	10.0	9.0	7.0	6.0	7.0	6.5	4.0	3.5	7.0	6.0	---	---
20	9.0	8.5	6.0	5.0	7.0	6.5	4.5	3.5	7.0	6.0	---	---
21	9.5	8.5	5.5	4.5	7.0	5.5	5.0	4.0	6.5	5.0	---	---
22	9.5	9.0	6.0	5.0	6.0	5.0	5.0	4.5	6.0	5.0	---	---
23	10.5	9.5	6.5	5.5	5.0	4.5	5.0	4.5	6.5	5.0	---	---
24	10.5	9.5	7.0	6.0	5.5	5.0	5.5	4.5	7.5	5.5	---	---
25	10.5	10.0	6.0	5.5	6.0	5.5	5.0	4.5	7.0	6.0	---	---
26	10.5	9.5	6.0	5.5	5.5	5.0	4.5	2.0	7.5	6.5	---	---
27	10.0	9.5	5.5	5.0	5.0	4.5	2.0	.5	8.0	7.0	---	---
28	9.5	9.0	5.5	4.5	5.0	4.0	1.0	.0	7.5	6.5	---	---
29	9.5	8.5	5.5	5.0	5.5	5.0	1.0	.5	7.5	6.0	---	---
30	9.0	8.0	6.0	5.0	6.5	5.0	1.5	.5	---	---	---	---
31	9.0	7.5	---	---	6.5	5.0	2.5	1.5	---	---	---	---
MONTH	15.0	7.5	9.0	4.5	7.5	4.0	8.0	.0	8.0	2.5	8.0	5.5

14161500 LOOKOUT CREEK NEAR BLUE RIVER, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1			---	---	11.5	10.0	17.0	11.5	19.5	15.0	16.0	12.0
2			---	---	11.0	8.5	17.5	12.5	19.0	14.5	15.5	14.0
3			---	---	11.0	7.5	13.5	12.0	19.0	15.0	15.0	11.0
4			---	---	11.0	8.5	13.0	11.5	18.5	14.0	15.5	11.5
5			---	---	10.0	8.5	14.0	11.5	18.0	14.5	16.0	12.5
6			---	---	9.5	8.0	16.5	11.5	17.5	13.0	16.0	13.0
7			---	---	10.5	8.0	17.5	12.0	18.5	13.5	17.0	14.0
8			---	---	13.5	9.0	17.0	12.5	18.0	14.0	15.5	12.0
9			---	---	13.5	10.0	15.0	13.0	18.5	14.0	16.0	13.0
10			---	---	14.0	9.5	17.5	12.5	18.5	14.5	17.0	13.5
11			---	---	11.5	10.0	17.0	13.0	19.0	15.5	---	---
12			---	---	11.0	9.5	17.5	13.0	18.5	14.0	14.5	13.5
13			---	---	10.5	9.0	17.5	12.5	19.0	14.5	13.5	12.5
14			---	---	9.5	9.0	15.5	14.0	18.5	14.5	14.5	11.5
15			---	---	14.5	8.5	18.0	12.5	17.5	13.5	14.0	10.5
16			---	---	11.0	10.0	18.5	13.0	18.5	14.5	14.5	11.5
17			---	---	14.5	9.5	18.5	13.0	17.0	13.5	14.5	11.5
18			---	---	15.5	11.5	18.5	13.5	16.5	14.5	13.5	12.5
19			13.5	9.0	15.5	11.5	18.5	13.5	16.5	12.0	13.5	12.5
20			15.0	9.0	16.0	11.5	19.5	14.0	17.0	12.5	13.0	12.0
21			11.5	10.0	15.5	11.5	20.5	15.0	16.5	12.5	13.5	11.5
22			10.0	8.5	13.0	11.5	20.5	16.0	17.0	13.0	12.5	10.0
23			10.0	7.5	13.5	10.5	20.0	16.0	17.0	13.0	13.0	10.5
24			9.0	7.5	12.5	10.5	19.5	14.5	17.5	13.0	13.5	10.5
25			9.0	7.5	12.0	10.5	19.5	14.5	17.0	13.0	13.5	10.5
26			8.0	7.0	12.0	9.5	20.0	15.0	16.5	13.5	13.5	11.5
27			9.0	7.0	15.5	9.5	20.5	15.5	16.0	14.5	13.0	11.0
28			12.0	7.5	16.5	11.5	20.5	16.0	16.5	14.0	14.0	11.5
29			10.5	8.0	16.5	11.0	20.0	15.5	15.5	14.0	13.5	11.0
30			12.5	8.0	16.5	11.0	20.0	14.5	14.5	12.5	14.0	11.5
31			13.5	9.0	---	---	20.0	16.0	16.0	13.5	---	---
MONTH			15.0	7.0	16.5	7.5	20.5	11.5	19.5	12.0	17.0	10.0

14162100 BLUE RIVER LAKE NEAR BLUE RIVER, OR

LOCATION.--Lat 44°10'20", long 122°19'40", in SE¼SE¼ sec.16, T.16 S., R.4 E., Lane County, Hydrologic Unit 17090004, in intake tower near left end of Blue River Dam on Blue River, 1.4 mi (2.3 km) north of town of Blue River, and at mile 1.7 (2.7 km).

DRAINAGE AREA.--87.3 mi² (226.1 km²).

PERIOD OF RECORD.--October 1968 to current year. Prior of October 1971, published as Blue River Reservoir near Blue River.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by earthfill dam with concrete gate and spillway section, completed in 1968 by Corps of Engineers; storage began October 1968. Total capacity is 89,520 acre-ft (110 hm³) at elevation 1,357 ft (413.6 m), maximum pool, and usable capacity is 85,550 acre-ft (105 hm³) between elevations 1,180 ft (359.7 m), minimum flood control pool, and 1,357 ft (413.6 m), maximum pool. Reservoir used for flood control. Figures given herein represent total contents.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 85,680 acre-ft (106 hm³) June 12, 13, 1977, elevation, 1,353.02 ft (412.400 m); minimum observed since first filling in 1968, 305 acre-ft (376,000 m³) Dec. 7, 1973, elevation, 1,125.47 ft (343.043 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 85,050 acre-ft (105 hm³) July 5-9, elevation, 1,352.36 ft (412.199 m); minimum, 3,440 acre-ft (4.24 hm³) Jan. 11, elevation, 1,175.85 ft (358.399 m).

Capacity table (elevation, in feet, and total contents, in acre-feet)

1,120	136	1,160	1,880	1,250	19,260
1,130	437	1,180	3,970	1,290	36,960
1,140	764	1,200	7,030	1,340	73,710
1,150	1,210	1,220	11,040	1,354	86,620

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1243.48	1214.51	1180.74	1184.80	1202.52	1287.01	1321.84	1343.20	1351.97	1352.24	1328.26	1274.39
2	1243.12	1211.66	1209.37	1185.16	1207.93	1287.08	1322.50	1343.70	1352.07	1352.26	1326.92	1272.16
3	1242.78	1207.85	1217.95	1182.81	1217.92	1287.74	1323.13	1344.16	1352.13	1352.28	1325.53	1269.84
4	1242.43	1206.82	1220.65	1180.42	1224.98	1289.58	1323.80	1344.60	1352.11	1352.34	1324.16	1267.30
5	1242.08	1206.54	1216.30	1201.02	1229.84	1291.69	1324.71	1345.02	1352.09	1352.36	1322.78	1264.57
6	1241.73	1203.85	1196.31	1204.66	1236.15	1293.62	1325.89	1345.40	1352.11	1352.36	1321.40	1261.80
7	1241.38	1201.93	1181.00	1202.42	1241.50	1295.21	1326.90	1345.73	1352.14	1352.36	1319.99	1259.00
8	1241.02	1199.76	1178.14	1198.27	1245.29	1296.52	1328.48	1346.05	1352.11	1352.36	1331.59	1256.09
9	1240.66	1197.06	1179.76	1195.67	1248.20	1297.63	1330.17	1346.49	1352.05	1352.35	1317.20	1253.20
10	1240.30	1193.94	1181.23	1183.15	1250.56	1298.66	1332.56	1346.93	1352.05	1352.35	1315.71	1252.06
11	1239.94	1190.24	1179.84	1175.85	1252.55	1299.76	1332.64	1347.35	1352.03	1352.17	1314.14	1251.91
12	1239.57	1185.94	1178.88	1235.14	1254.25	1300.84	1332.52	1347.72	1352.05	1351.83	1312.56	1251.78
13	1239.22	1181.34	1180.09	1269.83	1255.75	1302.61	1332.89	1348.09	1352.03	1351.45	1310.97	1251.65
14	1238.96	1178.25	1181.79	1291.33	1257.07	1306.01	1333.80	1348.47	1352.03	1350.87	1309.35	1251.52
15	1238.66	1177.69	1181.80	1299.04	1258.24	1308.17	1334.65	1348.79	1352.05	1349.88	1307.72	1251.38
16	1238.32	1178.51	1180.62	1300.95	1259.32	1309.64	1335.06	1349.04	1352.11	1348.67	1306.09	1251.23
17	1237.97	1180.34	1180.11	1298.19	1260.42	1310.83	1335.46	1349.28	1352.13	1347.47	1304.42	1250.45
18	1238.47	1184.68	1179.65	1291.15	1261.73	1312.13	1335.95	1349.49	1352.10	1346.25	1302.77	1249.46
19	1238.42	1184.89	1180.85	1282.67	1263.92	1313.28	1336.61	1349.71	1352.09	1345.05	1301.11	1248.84
20	1234.30	1183.73	1182.91	1270.97	1266.26	1314.40	1337.37	1350.27	1352.22	1343.81	1299.41	1248.86
21	1228.69	1181.62	1184.64	1255.67	1268.17	1315.11	1337.98	1350.34	1352.10	1342.57	1297.53	1248.89
22	1225.28	1184.82	1183.05	1241.09	1270.01	1315.34	1338.21	1350.35	1352.07	1341.33	1295.61	1248.85
23	1223.94	1190.48	1180.14	1230.88	1272.21	1315.52	1338.52	1350.38	1352.09	1340.07	1293.67	1248.74
24	1221.58	1197.38	1180.59	1224.59	1274.13	1315.59	1339.13	1350.65	1352.11	1338.80	1291.68	1248.62
25	1220.77	1188.30	1180.15	1220.09	1276.06	1315.92	1339.75	1351.09	1352.16	1337.52	1289.63	1248.48
26	1219.08	1181.03	1178.98	1215.87	1279.14	1316.72	1340.33	1351.76	1352.23	1336.25	1287.58	1248.33
27	1217.27	1182.18	1178.68	1210.90	1281.96	1317.61	1340.95	1352.05	1352.22	1334.96	1285.48	1248.17
28	1215.00	1182.52	1179.10	1207.25	1284.81	1318.49	1341.50	1351.95	1352.17	1333.66	1283.32	1248.02
29	1213.02	1180.74	1179.20	1205.11	1286.57	1319.39	1342.05	1351.94	1352.16	1332.36	1281.15	1247.87
30	1212.45	1179.99	1179.13	1202.89	---	1320.27	1342.65	1351.97	1352.20	1330.94	1278.93	1247.71
31	1216.05	---	1179.67	1200.90	---	1321.09	---	1351.97	---	1329.61	1276.68	---
MEAN	1232.77	1190.62	1185.53	1227.38	1254.74	1306.24	1333.60	1348.51	1352.11	1345.44	1305.27	1254.04
MAX	1243.48	1214.51	1220.65	1300.95	1286.57	1321.09	1342.65	1352.05	1352.23	1352.36	1331.59	1274.39
MIN	1212.45	1177.69	1178.14	1175.85	1202.52	1287.01	1321.84	1343.20	1351.97	1329.61	1276.68	1247.71
(†)	10160	3970	3930	7190	35020	58080	76070	84680	84900	64860	29900	18510
(‡)	-7140	-6190	-40	+3260	+27830	+23060	+17990	+8610	+220	-20040	-34960	-11390

CAL YR 1979 MEAN 1268.90 MAX 1352.01 MIN 1177.69 AC-FT‡ -520
WTR YR 1980 MEAN 1278.10 MAX 1352.36 MIN 1175.85 AC-FT‡ -1210

† Contents, in acre-feet, at 2400, on last day of month.
‡ Change in contents, in acre-feet.

14162200 BLUE RIVER AT BLUE RIVER, OR

LOCATION.--Lat 44°09'45", long 122°19'55", in NW¼SE¼ sec.21, T.16 S., R.4 E., Lane County, Hydrologic Unit 17090004, on right bank 0.3 mi (0.5 km) upstream from Simmonds Creek, 0.7 mi (1.1 km) north of town of Blue River, 0.8 mi (1.3 km) downstream from Blue River Dam, and at mile 0.9 (1.4 km).

DRAINAGE AREA.--87.7 mi² (227.1 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,056.53 ft (322.030 m) National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). Prior to Aug. 25, 1966, nonrecording gage at datum 0.80 ft (0.244 m) higher.

REMARKS.--Water-discharge records excellent. Flow regulated since October 1968 by Blue River Lake (see station 14162100). No diversion above station. Discharge not adjusted for storage or release from Blue River Lake as losses from reservoir at times exceed natural flow.

AVERAGE DISCHARGE.--14 years, 466 ft³/s (13.20 m³/s), 337,600 acre-ft/yr (416 hm³/yr), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,270 ft³/s (206 m³/s) Feb. 23, 1968, gage height, 8.93 ft (2.722 m); minimum, 0.80 ft³/s (0.023 m³/s) Oct. 8, 10, 11, 1968; minimum daily, 3.7 ft³/s (0.10 m³/s) Oct. 8, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,620 ft³/s (103 m³/s) Jan. 21, gage height, 8.10 ft (2.467 m); minimum, 18 ft³/s (0.51 m³/s) May 13-15; minimum daily, 18 ft³/s (0.51 m³/s) May 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	496	334	492	288	465	43	44	204	93	563	554
2	76	491	625	610	158	465	43	44	207	93	563	550
3	76	500	1480	724	53	240	43	44	279	91	559	541
4	75	500	1740	715	60	49	43	44	276	91	559	573
5	76	625	1940	899	58	48	43	44	245	91	554	587
6	76	575	2450	1020	60	49	44	45	232	91	554	582
7	76	397	1510	980	53	49	44	45	256	91	550	573
8	75	352	625	1000	47	46	44	45	264	91	545	563
9	75	345	397	1000	48	45	237	46	248	91	541	559
10	75	349	518	1410	48	45	685	46	204	91	563	253
11	75	341	503	949	48	46	884	47	181	152	582	61
12	75	349	436	842	47	45	884	47	162	212	577	53
13	75	301	306	44	47	44	884	27	190	229	573	53
14	75	212	268	42	47	47	772	18	193	322	573	53
15	75	111	313	545	47	45	691	35	164	489	568	53
16	73	92	331	1050	48	44	691	43	140	573	563	53
17	73	159	292	2190	48	139	691	43	133	568	563	166
18	103	280	277	2930	48	184	519	43	133	568	559	212
19	585	320	277	2880	49	181	450	43	133	568	554	139
20	987	317	317	3290	50	181	454	43	133	568	550	53
21	960	310	525	3500	49	300	454	96	133	563	587	48
22	556	283	720	2880	49	365	454	162	133	563	596	52
23	310	527	644	1770	51	365	341	119	133	563	591	55
24	389	1660	514	1100	51	365	224	42	133	563	591	55
25	424	1920	500	812	49	259	184	42	133	563	587	55
26	445	1080	461	712	50	131	184	42	154	563	582	54
27	436	483	371	696	48	90	184	322	162	563	577	54
28	445	393	307	528	49	61	186	368	150	563	573	54
29	367	409	292	392	309	43	117	250	119	563	568	54
30	304	356	292	385	---	43	57	204	97	563	563	54
31	416	---	292	331	---	43	---	204	---	563	559	---
TOTAL	8004	14533	19857	36718	2057	4522	10574	2687	5324	11356	17587	6766
MEAN	258	484	641	1184	70.9	146	352	86.7	177	366	567	226
MAX	987	1920	2450	3500	309	465	884	368	279	573	596	587
MIN	73	92	268	42	47	43	43	18	97	91	541	48
AC-FT	15880	28830	39390	72830	4080	8970	20970	5330	10560	22520	34880	13420

CAL YR 1979 TOTAL 148299 MEAN 406 MAX 2800 MIN 42 AC-FT 294200
WTR YR 1980 TOTAL 139985 MEAN 382 MAX 3500 MIN 18 AC-FT 277700

14162200 BLUE RIVER AT BLUE RIVER, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: August 1966 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 26.0°C July 6, 1968; minimum, 0.0°C Jan. 5-9, 1974.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 21.0°C Sept. 10; minimum, 2.5°C Jan. 31, Feb. 1.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	20.0	18.5	11.0	10.0	6.0	4.5	---	---	4.0	2.5	5.0	4.0
2	20.0	18.5	10.5	9.5	6.5	5.5	---	---	5.0	4.0	5.5	4.5
3	19.5	18.5	10.5	9.5	8.0	6.5	---	---	5.0	3.5	6.5	4.0
4	19.5	18.0	10.5	10.5	7.5	7.0	---	---	4.5	4.0	6.0	5.5
5	19.5	18.0	10.5	9.5	8.0	7.0	---	---	5.0	4.0	7.0	5.0
6	18.5	18.0	10.0	9.5	7.5	7.0	---	---	5.0	4.0	7.0	4.5
7	18.5	18.0	10.0	9.0	7.0	6.0	---	---	5.5	4.0	6.5	4.0
8	19.5	18.0	9.5	8.5	6.5	6.0	---	---	5.5	4.0	7.5	5.0
9	19.5	18.0	9.5	9.0	6.5	6.0	---	---	5.5	4.5	6.5	4.5
10	19.5	18.0	9.5	8.5	6.5	6.5	---	---	6.0	4.0	6.0	5.0
11	19.0	17.5	9.5	8.5	6.5	4.5	---	---	6.0	4.0	6.5	4.5
12	18.5	17.5	9.0	8.0	6.0	4.5	---	---	6.0	4.5	6.0	5.0
13	18.5	17.5	9.0	8.0	5.0	4.0	---	---	5.0	4.5	6.5	5.5
14	18.0	17.5	8.5	7.5	5.5	4.5	---	---	6.0	4.5	6.5	5.0
15	18.5	17.5	8.0	6.5	5.5	5.0	---	---	5.0	4.5	7.5	5.0
16	18.0	17.5	7.5	6.5	6.0	4.5	---	---	5.0	4.5	5.5	5.0
17	18.5	17.0	7.5	6.5	6.0	4.5	---	---	5.0	4.0	5.5	5.0
18	17.5	16.5	7.5	7.0	6.5	4.5	---	---	5.5	4.5	6.0	4.5
19	17.0	15.0	7.5	6.5	6.0	5.5	---	---	5.5	4.0	5.5	4.5
20	15.0	14.0	7.0	6.5	6.5	6.0	---	---	6.5	4.5	5.5	5.0
21	14.0	13.5	7.0	5.5	7.0	6.5	5.5	5.5	5.5	4.5	6.0	5.0
22	14.0	13.0	6.5	6.0	7.0	5.5	5.5	5.0	6.0	4.5	6.0	4.5
23	13.5	12.5	6.0	5.0	6.5	4.5	5.0	5.0	6.5	4.5	6.0	5.0
24	13.5	12.5	6.5	6.0	5.5	4.5	5.0	4.5	5.5	4.5	6.0	5.0
25	14.0	13.5	7.0	6.5	6.0	4.5	5.0	4.5	6.0	4.5	6.5	5.0
26	13.5	12.5	6.5	5.0	6.5	5.0	5.0	4.0	5.5	4.5	6.0	5.0
27	13.0	12.5	6.5	4.5	---	---	4.5	4.5	6.0	4.5	7.0	5.0
28	13.0	12.5	6.0	4.0	---	---	4.5	3.0	5.5	4.0	8.0	5.0
29	12.5	12.0	5.5	4.0	---	---	3.0	3.0	5.0	4.5	6.5	5.0
30	12.5	12.0	5.5	4.5	---	---	3.0	3.0	---	---	7.5	5.0
31	12.0	10.0	---	---	---	---	3.0	2.5	---	---	7.0	5.5
MONTH	20.0	10.0	11.0	4.0	8.0	4.0	5.5	2.5	6.5	2.5	8.0	4.0

WILLAMETTE RIVER BASIN

14162200 BLUE RIVER AT BLUE RIVER, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.5	5.5	9.5	5.0	7.0	6.0	9.0	7.0	9.0	8.0	18.0	17.0
2	8.0	5.0	9.0	6.5	7.0	6.5	9.0	7.0	9.0	8.0	18.5	18.0
3	7.0	5.0	9.5	6.5	7.0	6.0	8.0	6.5	9.0	7.5	19.0	18.5
4	7.5	5.5	9.5	6.0	7.5	6.0	8.5	7.0	9.5	8.5	19.5	19.0
5	7.5	5.5	8.0	6.5	7.5	6.5	8.5	6.5	9.5	8.0	19.5	19.0
6	6.5	5.0	9.0	6.5	7.5	6.0	9.0	6.0	9.5	9.0	19.5	19.5
7	7.5	6.0	9.5	6.5	7.5	6.0	9.0	6.5	10.0	9.0	19.5	19.5
8	7.0	6.0	8.0	6.0	7.5	6.5	9.0	7.0	10.0	9.5	20.0	19.5
9	7.0	5.0	8.0	5.5	7.5	6.0	9.0	6.5	10.0	9.5	20.0	19.5
10	6.5	6.0	7.5	6.5	8.0	7.0	9.0	7.0	10.5	10.0	21.0	19.0
11	6.0	5.5	7.5	6.5	7.5	6.0	9.0	6.5	10.5	10.0	20.0	18.5
12	6.5	5.5	9.0	6.5	8.0	6.5	8.5	6.5	11.0	10.0	19.0	18.5
13	6.0	5.0	9.0	6.5	7.5	6.5	8.5	7.0	11.0	10.5	19.0	18.0
14	6.0	5.5	9.0	7.0	7.0	6.5	8.0	6.5	11.0	10.5	19.5	18.0
15	6.5	5.5	8.5	6.0	8.0	7.0	8.0	7.0	11.5	11.0	20.0	18.0
16	6.5	5.0	9.0	6.0	7.5	6.0	8.0	6.5	11.5	11.0	20.0	18.0
17	6.0	5.5	9.0	6.0	8.5	7.0	8.0	6.5	11.5	11.0	19.0	17.5
18	6.5	5.0	9.0	6.5	8.5	6.0	8.0	6.5	12.0	11.5	19.0	18.5
19	6.5	5.5	8.5	6.0	8.5	7.0	8.0	7.0	12.0	11.5	19.0	18.5
20	6.5	5.5	9.0	6.5	8.5	7.0	8.0	7.0	12.5	12.0	19.0	18.0
21	6.5	5.5	7.5	5.5	8.0	6.0	8.0	7.5	12.5	12.0	19.0	17.5
22	6.5	6.0	7.0	6.0	8.0	6.0	8.5	7.5	13.0	12.5	19.0	17.0
23	6.5	6.5	8.0	6.5	8.5	7.0	8.0	7.5	13.5	13.0	19.0	17.0
24	6.5	5.0	7.5	6.5	8.0	6.0	8.5	7.5	13.5	13.0	19.0	17.0
25	7.0	5.5	7.5	5.5	8.0	6.5	8.5	7.5	14.0	13.5	18.5	17.0
26	7.0	5.5	7.5	6.0	8.0	6.5	8.5	7.5	14.5	14.0	18.5	17.0
27	7.5	6.0	7.0	6.0	8.5	6.0	8.5	8.0	15.0	14.5	18.0	17.0
28	7.0	6.5	7.0	6.5	8.5	6.5	8.5	8.0	15.5	15.0	18.5	17.0
29	7.5	6.0	7.0	6.5	8.5	6.5	8.5	8.0	16.0	15.5	18.5	17.0
30	9.0	6.5	7.5	6.0	9.0	7.0	8.5	8.0	17.0	16.0	18.5	17.0
31	---	---	7.5	5.5	---	---	8.5	8.0	17.5	16.5	---	---
MONTH	9.0	5.0	9.5	5.0	9.0	6.0	9.0	6.0	17.5	7.5	21.0	17.0

14162500 MCKENZIE RIVER NEAR VIDA, OR

LOCATION.--Lat 44°07'30", long 122°28'10", in NE¼NE¼ sec.5, T.17 S., R.3 E., Lane County, Hydrologic Unit 17090004, on right bank 0.4 mi (0.6 km) downstream from Mason Creek, 5.4 mi (8.7 km) east of Vida, and at mile 47.7 (76.7 km).

DRAINAGE AREA.--930 mi² (2,409 km²) at cableway 0.4 mi (0.6 km) downstream, where all discharge measurement are made.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1910 to March 1911 (published as "at Martins Rapids, near Vida"), September 1924 to current year. Monthly discharge only for some periods, published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 855.71 ft (260.820 m) National Geodetic Vertical Datum of 1929 (levels by Eugene Water and Electric Board). July 1, 1910, to Mar. 31, 1911, nonrecording gage at site 3 mi (5 km) downstream at different datum. Sept. 1, 1924, to Nov. 16, 1928, nonrecording gage at site 20 ft (6 m) upstream at datum 0.15 ft (0.046 m) lower. Nov. 17, 1928, to Sept. 23, 1968, water-stage recorder at present site on left bank at datum 0.15 ft (0.046 m) lower.

REMARKS.--Water-discharge records excellent. Flow regulated since 1963 by Smith River Reservoir (see station 14158795) and Cougar Lake (see station 14159400), and since 1968 by Blue River Lake (see station 14162100). No diversion above station. All records given herein are for measuring site.

AVERAGE DISCHARGE.--56 years (water years 1925-80), 4,033 ft³/s (114.2 m³/s), 2,922,000 acre-ft/yr (3.60 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 64,400 ft³/s (1,820 m³/s) Dec. 28, 1945, gage height, 17.70 ft (5.395 m), site and datum then in use, from rating curve extended above 32,000 ft³/s (906 m³/s); minimum, 1,260 ft³/s (35.7 m³/s) Nov. 7, 1930, Sept. 17, Oct. 4, 8, 9, 1931.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in January 1923 reached a stage of 17.2 ft (5.24 m), from floodmarks, discharge, 62,000 ft³/s (1,760 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 18,800 ft³/s (532 m³/s) Jan. 12, gage height, 7.21 ft (2.198 m); minimum, 1,580 ft³/s (44.7 m³/s) Sept. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2040	3570	3650	3240	4130	3810	2590	3410	2900	2300	2540	2740
2	1770	3330	6050	3450	4240	3590	2500	3020	3110	2400	2790	2790
3	1740	3280	7670	3830	4900	3310	2450	2950	3470	2480	2770	2790
4	1800	3490	7970	3910	4700	3260	2470	2920	3390	2500	2790	2770
5	1820	3850	7670	7020	3670	3390	2550	2930	3330	2450	2790	2770
6	1830	3530	7300	6370	3710	3350	2790	2920	3430	2430	2770	2760
7	1800	2950	5870	5470	3790	3190	2710	2830	3530	2310	2770	2600
8	1760	2760	4790	5360	3570	3080	3010	2670	3450	2070	2770	2600
9	1730	2690	4390	5430	3330	2930	4200	2670	3370	1960	2770	2600
10	1730	2690	4700	5650	3150	2880	4920	2810	3200	1990	2760	2400
11	1700	2670	4480	5080	3060	3010	4770	2810	3020	2060	2760	2200
12	1730	2620	4310	11400	2990	3020	4530	2740	2920	2120	2760	2180
13	1730	2520	4030	15900	2920	3470	4810	2650	3020	2120	2770	2180
14	1770	2350	3890	15400	2810	4790	5010	2540	3020	2220	2760	2170
15	1880	2140	3910	11300	2720	4110	4880	2470	2900	2400	2740	1880
16	1980	2220	3890	9430	2650	3590	4640	2650	2810	2540	2740	1610
17	1960	2430	3770	10600	2620	3590	4640	2640	2770	2470	2740	1830
18	2170	3110	3730	12000	2710	3850	4420	2400	2670	2430	2770	2140
19	3870	2900	3570	11400	2990	3670	4280	2350	2540	2370	2770	2170
20	4220	2740	3110	11700	3100	3630	4500	2330	2520	2310	2740	2280
21	3770	2760	3390	12000	2880	3590	4940	2400	2470	2300	2700	2250
22	3200	3060	3890	10500	2920	3530	4880	2550	2420	2310	2720	2170
23	2920	3890	3750	6700	3100	3450	4610	2670	2470	2330	2720	2100
24	3040	6570	3530	5570	3010	3310	4370	2690	2430	2310	2740	2090
25	3470	6800	3350	5160	2950	3130	4170	2810	2770	2310	2740	2100
26	3330	5250	3220	4940	3330	3040	4070	3020	2920	2300	2760	2100
27	3280	4220	3080	4750	3370	3060	4090	3410	2640	2280	2760	2100
28	3240	3850	2950	4440	3530	2950	4170	3470	2520	2230	2760	2100
29	3130	3750	2830	4110	3750	2860	4030	3220	2400	2230	2740	2090
30	3100	3650	2770	3990	---	2770	3750	2950	2330	2230	2700	2070
31	4010	---	2740	3910	---	2650	---	2790	---	2250	2720	---
TOTAL	77520	101640	134250	230010	96600	103860	119750	86690	86740	71010	85130	68630
MEAN	2501	3388	4331	7420	3331	3350	3992	2796	2891	2291	2746	2288
MAX	4220	6800	7970	15900	4900	4790	5010	3470	3530	2540	2790	2790
MIN	1700	2140	2740	3240	2620	2650	2450	2330	2330	1960	2540	1610
AC-FT	153800	201600	266300	456200	191600	206000	237500	171900	172000	140800	168900	136100

CAL YR 1979 TOTAL 1305080 MEAN 3576 MAX 10600 MIN 1700 AC-FT 2589000
WTR YR 1980 TOTAL 1261830 MEAN 3448 MAX 15900 MIN 1610 AC-FT 2503000

14162500 MCKENZIE RIVER NEAR VIDA, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1976 to current year.
WATER TEMPERATURES: June 1961 to current year.

INSTRUMENTATION.--Graphic temperature recorder since June 1961. Dual conductivity-temperature recorder since November 1976.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 69 micromhos Mar. 26, 1978; minimum recorded, 24 micromhos Nov. 25, 1977.
WATER TEMPERATURES: Maximum, 16.0°C July 6, 7, 28, 1968; minimum recorded, 0.5°C Jan. 1, 1979.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: maximum, 62 micromhos Oct. 1, 2, 9-11; minimum, 27 micromhos Jan. 12.
WATER TEMPERATURES: Maximum, 15.0°C July 8, 20-23, 27, 28, Sept. 5, 7, 9; minimum recorded, 2.0°C Jan. 29-31.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	PH FIELD (UNITS)	OXYGEN, DIS-SOLVED (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SILICA, DIS-SOLVED (MG/L AS SIO2)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)
FEB												
26...	1400	3530	7.0	--	11.2	50	20	3.5	1.6	3.0	.8	21
SEP												
26...	1600	2090	12.5	7.8	11.5	68	22	4.7	1.9	3.7	1.1	22

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
FEB												
26...	.1	1.2	.1	.04	.00	.04	.030	1.4	15	0	--	43
SEP												
26...	1.5	1.4	.1	.00	.56	.56	.040	3.4	20	0	50	50

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
FEB												
26...	410	2	1	2	<1	0	0	3	<3	6	0	110
SEP												
26...	282	1	1	0	<1	0	0	1	<3	14	3	120

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
FEB											
26...	20	8	0	0	<1	10	9	0	0	--	--
SEP											
26...	--	3	0	10	3	20	10	0	D	.D	.0

14162500 MCKENZIE RIVER NEAR VIDA, OR--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	54	52	53	---	48	56	54	55	---	50	47
2	60	54	47	52	---	49	55	55	55	---	48	48
3	60	55	43	50	43	50	56	55	54	---	49	49
4	59	54	41	50	45	51	55	55	52	---	49	49
5	59	54	42	45	46	50	54	54	52	---	49	49
6	59	54	---	45	---	50	54	54	52	---	48	49
7	59	56	---	47	50	50	55	54	52	---	48	50
8	60	57	---	47	51	52	54	53	53	50	49	51
9	60	59	---	47	52	52	50	53	54	50	49	51
10	61	58	47	48	52	52	51	53	54	51	48	51
11	60	58	48	49	53	53	52	54	55	51	48	54
12	60	59	49	36	53	53	52	54	54	50	48	55
13	60	60	49	29	54	52	52	54	53	---	48	52
14	59	60	49	30	53	51	51	55	53	---	48	53
15	60	60	49	33	54	53	51	56	54	---	47	52
16	60	58	50	34	55	54	52	55	55	53	47	53
17	60	59	49	34	55	55	52	54	56	53	48	52
18	59	60	50	34	55	54	52	54	55	53	48	50
19	59	60	50	---	---	54	52	56	56	53	47	50
20	58	59	52	---	---	53	50	57	57	54	47	50
21	59	57	51	---	51	53	49	56	57	54	47	51
22	59	55	51	---	54	53	50	53	57	55	47	51
23	60	47	52	---	54	49	50	53	57	53	46	52
24	59	49	52	---	54	49	51	53	57	53	46	52
25	57	52	52	---	---	50	51	53	---	53	46	53
26	54	53	52	---	50	50	52	53	---	54	47	53
27	---	52	53	---	50	51	52	52	---	54	47	54
28	53	52	54	46	49	53	52	51	---	53	46	53
29	54	---	54	46	49	54	51	52	---	52	46	55
30	54	52	53	46	---	54	53	54	---	52	47	54
31	53	---	54	46	---	55	---	55	---	52	48	---
MEAN	58	56	50	43	51	52	52	54	55	53	48	51

14162500 MCKENZIE RIVER NEAR VIDA, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		.FEBRUARY		MARCH	
1	12.5	10.5	10.0	8.5	6.5	6.0	6.5	6.0	4.5	4.0	7.0	6.0
2	13.0	10.0	10.0	9.0	7.0	6.5	6.0	5.5	5.0	4.5	8.0	6.5
3	13.0	10.0	10.0	9.5	7.0	7.0	6.5	6.0	5.5	4.5	7.5	6.5
4	12.5	10.0	10.0	9.5	7.5	7.0	6.5	6.0	5.5	4.5	8.0	7.0
5	13.0	10.0	10.0	9.0	7.0	6.5	7.0	6.0	6.0	5.0	7.5	7.0
6	12.0	10.5	9.5	9.0	6.5	6.5	6.0	5.5	6.5	6.0	8.0	6.5
7	12.0	11.0	9.0	8.0	6.5	6.0	5.5	5.0	7.0	6.0	8.0	6.5
8	13.0	11.0	8.5	7.5	6.5	6.0	5.0	4.5	7.5	6.0	8.0	6.5
9	12.5	10.0	8.0	7.0	6.5	6.0	5.5	4.5	7.5	6.5	8.5	6.5
10	12.0	10.0	8.0	7.0	6.5	5.5	4.5	4.0	8.0	6.5	7.5	6.0
11	12.5	10.0	8.0	6.5	5.5	5.0	5.0	4.0	7.5	6.5	7.5	6.0
12	12.0	10.0	8.0	6.5	5.5	5.0	6.0	5.0	7.5	6.0	7.0	5.5
13	12.0	10.0	8.0	6.5	6.0	5.0	6.5	6.0	8.0	6.5	7.0	6.0
14	11.5	10.5	8.0	7.5	6.0	5.5	6.5	6.0	7.5	6.5	6.5	5.5
15	12.5	10.5	8.0	8.0	6.0	5.5	6.0	5.5	8.0	6.5	6.0	5.0
16	12.0	10.5	8.0	6.5	5.5	5.0	6.0	6.0	8.0	7.5	7.5	5.5
17	12.0	10.5	7.5	7.0	6.5	5.5	6.0	5.5	8.0	7.5	7.0	6.0
18	11.0	10.5	7.5	6.0	6.5	6.0	5.5	5.0	8.5	7.5	7.5	6.0
19	11.5	10.0	7.0	5.5	6.5	6.0	5.0	5.0	8.5	7.5	8.0	6.5
20	11.0	10.5	7.0	6.5	6.5	6.5	5.0	5.0	8.5	7.5	7.5	6.5
21	11.5	11.0	7.0	6.5	6.5	6.0	5.0	5.0	8.5	6.5	7.0	6.0
22	11.5	11.0	7.0	6.5	6.0	5.5	5.0	5.0	8.0	7.0	8.0	6.5
23	11.5	10.5	7.0	6.5	5.5	5.0	---	5.0	8.5	7.5	7.5	6.0
24	11.0	10.5	6.5	6.0	6.0	5.5	---	---	9.5	8.0	8.0	6.0
25	11.5	11.0	6.5	5.5	6.0	5.5	---	---	9.0	8.0	8.5	5.5
26	11.0	10.5	6.0	5.5	6.0	5.0	---	---	7.5	7.0	7.0	5.0
27	11.5	10.5	6.0	5.5	5.5	4.5	---	---	8.0	7.0	8.0	5.5
28	11.0	10.0	6.0	6.0	5.5	4.5	3.0	---	8.0	7.0	7.5	5.0
29	10.5	10.0	6.0	5.5	6.0	5.5	3.0	2.0	7.5	6.5	7.0	6.0
30	10.0	9.5	6.5	5.5	6.0	5.5	3.5	2.0	---	---	7.5	5.5
31	10.0	9.0	---	---	6.5	53.0	4.0	3.0	---	---	7.0	5.5
MONTH	13.0	9.0	10.0	5.5	7.5	4.5	7.0	2.0	9.5	4.0	8.5	5.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.5	5.5	11.0	7.0	10.5	8.5	14.0	10.5	14.0	9.5	14.0	10.5
2	8.5	5.5	10.0	8.0	8.5	7.5	14.0	11.0	14.0	9.0	13.0	11.5
3	7.5	5.0	11.5	7.0	10.5	7.5	12.0	9.5	13.5	9.5	14.0	10.5
4	8.0	6.0	12.5	8.0	10.5	7.5	11.0	10.0	13.5	9.0	14.5	11.0
5	8.0	6.5	10.0	8.5	10.5	7.5	11.5	10.0	13.0	9.5	15.0	11.0
6	7.0	5.5	10.5	8.0	9.0	8.0	14.0	10.0	13.0	9.0	14.5	11.5
7	7.0	5.0	12.0	7.5	10.0	8.0	14.0	10.0	13.5	9.0	15.0	12.0
8	7.0	6.0	10.0	8.0	12.0	8.5	15.0	10.0	13.5	9.5	14.5	11.0
9	7.5	6.5	9.0	8.0	11.5	8.5	13.0	10.5	14.0	9.5	15.0	11.5
10	8.0	6.0	8.5	7.5	12.5	8.5	14.5	9.5	13.5	9.5	14.0	12.0
11	9.0	5.5	8.5	7.5	10.5	8.5	14.0	9.5	14.0	10.0	13.5	10.0
12	9.5	6.5	10.5	7.5	10.5	8.5	14.5	10.0	13.5	9.5	12.0	10.5
13	9.0	6.5	9.5	8.0	10.0	8.0	13.5	10.0	14.0	9.5	11.0	10.0
14	7.5	7.0	11.0	7.5	8.5	8.0	13.0	10.5	13.5	10.0	12.0	9.5
15	9.0	6.5	10.0	7.5	13.0	8.0	13.0	9.5	12.5	9.5	12.5	9.0
16	9.5	6.0	11.0	7.0	11.0	9.0	14.0	9.0	14.0	10.0	13.0	9.5
17	8.5	6.5	12.5	7.0	13.0	8.5	14.0	9.5	13.0	9.5	13.5	9.5
18	9.5	6.5	12.0	8.0	13.5	8.5	14.0	9.5	12.0	10.0	12.0	11.0
19	8.5	7.0	12.5	8.0	13.0	8.5	14.0	9.5	13.5	9.5	12.0	10.5
20	8.0	7.0	13.0	8.5	13.5	9.5	15.0	9.5	13.5	9.5	11.5	10.5
21	7.0	6.5	11.5	9.0	12.0	9.5	15.0	10.0	13.5	9.5	12.5	10.0
22	8.0	6.5	9.5	8.0	11.5	9.5	15.0	10.5	13.5	9.5	12.0	9.0
23	8.5	7.0	10.0	7.5	11.5	9.0	15.0	10.5	14.0	10.0	12.5	9.5
24	9.0	7.0	8.5	7.5	11.0	9.0	14.5	9.5	14.0	10.0	13.0	10.0
25	9.5	6.5	8.5	7.5	10.0	9.0	14.5	9.5	14.0	10.0	13.0	10.0
26	10.5	7.0	8.5	7.5	11.0	10.0	14.5	10.0	13.5	10.0	13.0	10.5
27	11.0	7.0	9.5	7.5	13.5	10.0	15.0	10.0	13.0	11.0	12.5	10.5
28	9.0	7.5	11.0	7.5	14.0	10.5	15.0	10.5	13.5	10.5	13.0	10.5
29	9.0	6.5	10.5	7.5	14.0	10.5	14.5	10.0	12.5	10.0	12.5	10.0
30	9.5	6.5	12.5	8.0	14.0	10.0	14.5	9.5	13.0	10.0	13.0	10.5
31	---	---	12.5	8.0	---	---	14.5	10.5	14.5	11.0	---	---
MONTH	11.0	5.0	13.0	7.0	14.0	7.5	15.0	9.0	14.5	9.0	15.0	9.0

14163000 GATE CREEK AT VIDA, OR

LOCATION.--Lat 44°08'45", long 122°34'15", in SW¼ sec.28, T.16 S., R.2 E., Lane County, Hydrologic Unit 17090004, on right bank 300 ft (91 m) downstream from bridge on State Highway 126, at Vida, and at mile 0.2 (0.3 km).

DRAINAGE AREA.--47.6 mi² (123.3 km²).

PERIOD OF RECORD.--June 1951 to September 1957; annual maximums, water years 1958-65; August 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 764.56 ft (233.038 m) National Geodetic Vertical Datum of 1929. June 11, 1951, to Sept. 30, 1957, water-stage recorder, and Oct. 1, 1957, to Aug. 1, 1966, crest-stage gage at same site and datum.

REMARKS.--Records excellent. No regulation or diversion above station.

AVERAGE DISCHARGE.--20 years (water years 1952-57, 1967-80), 215 ft³/s (6.089 m³/s), 61.34 in/yr (1,558 mm/yr), 155,800 acre-ft/yr (192 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,140 ft³/s (202 m³/s) Dec. 22, 1964, gage height, 12.18 ft (3.712 m), from slope-area measurement of peak flow; minimum, 12 ft³/s (0.34 m³/s) Nov. 26, 27, 1952.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,800 ft³/s (51.0 m³/s) and maximum discharge, 2,630 ft³/s (74.5 m³/s) Jan. 12, gage height, 7.52 ft (2.292 m); minimum, 13 ft³/s (0.37 m³/s) Oct. 10-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	128	159	176	162	254	189	108	96	61	31	23
2	14	93	637	165	183	222	176	103	114	60	31	36
3	14	76	668	196	247	200	168	99	200	58	30	29
4	14	143	663	192	227	229	162	96	227	65	30	24
5	14	216	537	774	191	245	176	93	187	61	29	22
6	14	142	349	472	275	240	229	89	158	57	29	21
7	14	107	263	314	298	210	236	85	150	55	28	20
8	14	89	211	308	247	187	288	84	136	53	28	20
9	14	74	190	420	210	170	465	103	124	52	27	20
10	13	67	203	386	183	164	544	122	114	50	27	18
11	13	61	169	305	166	217	438	125	106	48	26	18
12	13	56	165	1610	154	222	341	116	106	47	26	20
13	13	53	161	1750	145	324	303	106	119	46	26	22
14	19	49	150	1570	137	711	275	99	114	45	25	21
15	22	46	138	1040	129	479	251	93	105	45	25	20
16	16	63	128	699	122	355	222	87	99	43	25	19
17	15	122	124	566	122	361	200	81	96	42	24	18
18	55	291	116	438	137	451	183	77	89	41	27	25
19	248	203	128	358	200	391	170	74	84	40	27	24
20	161	156	138	306	191	372	180	72	81	39	24	38
21	110	124	260	268	183	346	193	70	78	38	23	34
22	66	184	305	240	185	303	174	80	75	38	23	26
23	59	300	243	214	256	283	160	78	78	37	22	23
24	53	641	255	196	219	263	154	81	75	37	21	21
25	106	514	213	180	196	242	145	114	77	36	21	21
26	83	346	182	168	224	249	136	148	84	35	21	20
27	89	245	163	154	219	251	129	172	74	34	21	19
28	83	194	149	143	275	229	122	137	69	33	22	20
29	72	165	138	134	295	219	117	112	67	32	21	20
30	90	159	132	129	---	210	112	100	63	32	21	18
31	270	---	128	124	---	203	---	91	---	32	23	---
TOTAL	1795	5107	7465	13995	5778	8802	6638	3095	3245	1392	784	680
MEAN	57.9	170	241	451	199	284	221	99.8	108	44.9	25.3	22.7
MAX	270	641	668	1750	298	711	544	172	227	65	31	38
MIN	13	46	116	124	122	164	112	70	63	32	21	18
CFSM	1.22	3.57	5.06	9.48	4.18	5.97	4.64	2.10	2.27	.94	.53	.48
IN.	1.40	3.99	5.83	10.94	4.52	6.88	5.19	2.42	2.54	1.09	.61	.53
AC-FT	3560	10130	14810	27760	11460	17460	13170	6140	6440	2760	1560	1350

CAL YR 1979	TOTAL 62857	MEAN 172	MAX 1800	MIN 13	CFSM 3.61	IN 49.12	AC-FT 124700			
WTR YR 1980	TOTAL 58776	MEAN 161	MAX 1750	MIN 13	CFSM 3.38	IN 45.93	AC-FT 116600			

14165000 MOHAWK RIVER NEAR SPRINGFIELD, OR

LOCATION.--Lat 44°05'34", long 122°57'20", in SE¼NW¼ sec.17, T.17 S., R.2 W., Lane County, Hydrologic Unit 17090004, on left bank 50 ft (15 m) downstream from bridge, 1.3 mi (2.1 km) northeast of Springfield, and at mile 1.59. (2.56 km).

DRAINAGE AREA.--177 mi² (458 km²).

PERIOD OF RECORD.--September 1935 to September 1952, October 1963 to current year. Prior to October 1935 monthly discharge only, published in WSP 1318.

REVISED RECORDS.--WSP 1248: 1939. WSP 1738: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 442.47 ft (134.865 m) National Geodetic Vertical Datum of 1929. Oct. 1, 1935, to Sept. 30, 1952, nonrecording gage at same site and datum.

REMARKS.--Records good. Many diversions for irrigation above station.

AVERAGE DISCHARGE.--34 years, 532 ft³/s (15.07 m³/s), 40.82 in/yr (1,037 mm/yr), 385,400 acre-ft/yr (475 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft³/s (368 m³/s) Dec. 22, 1964, gage height, 22.60 ft (6.888 m); minimum, 8.2 ft³/s (0.23 m³/s) Sept. 9, 1967.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 22, 1955, reached at stage of 22.9 ft (6.98 m), from floodmark, probably affected by backwater from McKenzie River, discharge, 9,200 ft³/s (261 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,500 ft³/s (99.1 m³/s) and maximum discharge, 5,000 ft³/s (142 m³/s) Jan. 13, gage height, 12.93 ft (3.941 m); minimum, 20 ft³/s (0.57 m³/s) Oct. 3-7, 11-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	282	395	569	459	663	476	304	181	112	36	35
2	22	202	1810	538	522	603	441	284	208	107	36	43
3	21	161	2170	631	669	555	415	275	241	107	36	62
4	21	173	2030	618	563	629	407	264	241	138	36	38
5	20	353	1790	1840	514	636	441	253	225	128	36	33
6	20	273	1290	1540	586	600	663	243	205	115	36	30
7	21	214	987	1130	598	552	770	234	211	103	36	29
8	23	173	788	1140	552	514	710	230	194	96	36	29
9	24	149	680	1270	508	476	846	273	179	96	36	27
10	22	130	707	1490	469	459	972	269	175	115	36	25
11	20	119	580	1210	441	626	903	266	166	96	34	24
12	20	107	541	2330	412	612	788	243	164	90	34	24
13	20	100	503	4660	390	797	699	227	200	86	36	29
14	25	94	454	4430	372	2400	655	221	205	80	36	32
15	42	90	417	3660	351	1960	609	211	179	78	34	30
16	32	128	385	2590	332	1470	544	200	164	75	34	29
17	27	218	370	2090	339	1270	497	189	173	70	34	27
18	59	524	368	1860	392	1280	459	179	161	66	34	25
19	419	658	400	1540	533	1110	431	173	149	63	33	31
20	273	449	479	1350	505	1030	482	168	145	62	32	45
21	264	337	788	1270	469	949	677	166	142	62	27	75
22	135	456	1030	1110	514	846	589	186	138	57	26	52
23	128	862	926	797	655	770	519	208	138	56	26	42
24	105	1190	926	674	598	704	487	197	142	56	27	38
25	208	1180	770	618	555	658	451	205	159	54	28	36
26	179	1000	658	569	621	658	417	221	181	52	28	34
27	186	770	586	516	600	629	385	250	147	49	27	34
28	191	623	527	471	727	560	358	223	133	47	28	34
29	173	511	484	434	721	524	337	205	126	42	29	34
30	184	449	482	415	---	503	317	181	119	40	28	34
31	412	---	479	387	---	497	---	179	---	36	30	---
TOTAL	3317	11975	24800	43747	14967	25540	16745	6927	5191	2434	1005	1060
MEAN	107	399	800	1411	516	824	558	223	173	78.5	32.4	35.3
MAX	419	1190	2170	4660	727	2400	972	304	241	138	36	75
MIN	20	90	368	387	332	459	317	166	119	36	26	24
CFSM	.61	2.25	4.52	7.97	2.92	4.66	3.15	1.26	.98	.44	.18	.20
IN.	.70	2.52	5.21	9.19	3.15	5.37	3.52	1.46	1.09	.51	.21	.22
AC-FT	6580	23750	49190	86770	29690	50660	33210	13740	10300	4830	1990	2100

CAL YR 1979 TOTAL 166816 MEAN 457 MAX 3800 MIN 18 CFSM 2.58 IN 35.06 AC-FT 330900
WTR YR 1980 TOTAL 157708 MEAN 431 MAX 4660 MIN 20 CFSM 2.44 IN 33.15 AC-FT 312800

14166000 WILLAMETTE RIVER AT HARRISBURG, OR

LOCATION.--Lat 44°16'14", long 123°10'21", in NW¼NE¼ sec.16, T.15 S., R.4 W., Linn County, Hydrologic Unit 17090003, on right bank 75 ft (23 m) north of intersection of First Street and Kesling Street in Harrisburg and at mile 161.0 (259.0 km).

DRAINAGE AREA.--3,420 mi² (8,860 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1944 to current year. Gage-height records collected at same site in 1927-28, 1931, 1934, are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 288.39 ft (87.901 m) National Geodetic Vertical Datum of 1929. Oct 1 to Nov. 14, 1944, nonrecording gage at bridge 1,110 ft (338 m) upstream at different datum. Nov. 15, 1944, to Aug. 15, 1973, at site 1,100 ft (335 m) upstream at datum 2.00 ft (0.610 m) higher.

REMARKS.--Water-discharge records good. Flow regulated by 8 reservoirs above station (see elsewhere in this report). Many small diversions above station for irrigation.

AVERAGE DISCHARGE.--36 years, 12,270 ft³/s (347.5 m³/s), 8,890,000 acre-ft/yr (11.0 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 210,000 ft³/s (5,950 m³/s) Dec. 29, 1945, gage height, 19.69 ft (6.002 m), from rating curve extended above 115,000 ft³/s (3,260 m³/s); minimum, 1,990 ft³/s (56.4 m³/s) Oct 30, 1944.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood stage of 20.5 ft (6.25 m) was reached in December 1861, and 20.1 ft (6.13 m) in February 1890 (information from Corps of Engineers). Flood of Jan. 1, 1943, reached a stage of 19.1 ft (5.82 m) from National Weather Service.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 59,700 ft³/s (1,690 m³/s) Jan. 13, gage height, 12.25 ft (3.734 m); minimum, 3,830 ft³/s (108 m³/s) July 20, 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6700	12800	13400	8070	11600	9700	6290	6380	5720	4750	4280	4810
2	6220	11600	15400	9100	10600	9260	5970	5850	6090	4460	4550	4730
3	6120	10900	28500	9460	9260	8780	5720	5580	6620	4510	4640	6140
4	6180	10600	27500	10200	9860	8190	5640	5460	7500	4550	4600	6800
5	6220	11800	32400	16900	8590	8270	5660	5360	7420	4530	4600	6870
6	6200	13200	31800	23100	8090	8270	6380	5230	7320	4420	4590	6800
7	6220	10800	27100	17800	8830	7960	7570	5110	7220	4300	4530	6780
8	6220	10100	22300	18500	8400	7450	7850	4980	7040	4090	4490	6900
9	6180	10100	17300	18700	7900	7130	9670	5070	6580	3970	4460	6830
10	6060	9490	15300	26100	7400	7060	13600	5310	6380	4000	4490	6800
11	5860	9350	14400	25700	7040	8320	14300	5400	6030	3920	4490	7060
12	5840	8520	13000	28400	6710	9290	13000	5330	5560	3920	4480	7300
13	5860	7650	12700	54300	6490	10100	12300	5250	5700	3910	4510	7220
14	5960	7420	12000	49300	6290	17500	12300	5150	5970	3890	4550	7220
15	6020	6720	11400	42300	6070	21700	11400	4980	5970	3950	4530	7180
16	6060	6650	11200	36600	5910	17800	10200	4960	5810	4040	4550	6780
17	6060	7020	11000	36600	5870	14200	9240	5190	5680	4040	4550	6580
18	6320	9430	10800	43400	6010	12900	8780	4830	5580	3970	4590	6940
19	9810	11800	10500	41900	7080	12400	8140	4700	5250	3940	4640	7080
20	20300	10800	8960	42200	7250	11600	8220	4600	5000	3880	4590	7150
21	20900	10300	8820	43600	7130	11800	10100	4570	4850	3920	4460	7400
22	17400	10400	11700	42200	6970	11100	11500	4770	4750	4080	4510	7200
23	11700	14500	12100	35000	8160	10600	10900	5020	4640	4260	4530	7080
24	10300	18800	11600	26400	8010	9720	9670	5090	4680	4320	4530	6990
25	10800	24000	10700	22600	7520	8480	8730	5230	4850	4280	4550	6990
26	12100	21900	9860	18200	7880	7850	7800	5700	5480	4280	4510	6920
27	11600	19500	9040	15400	8160	7800	7400	6490	5720	4280	4530	6920
28	11500	17300	8710	18400	8560	7300	7220	7320	5400	4230	4590	6970
29	11300	15400	8300	17600	9420	6850	7130	7010	5130	4180	4510	6920
30	10800	14500	7870	16500	---	6640	6740	6380	4980	4180	4530	6920
31	12400	---	7800	14200	---	6420	---	5970	---	4250	4570	---
TOTAL	281210	363350	453460	828730	227060	312440	269420	168270	174920	129300	140530	204280
MEAN	9071	12110	14630	26730	7830	10080	8981	5428	5831	4171	4533	6809
MAX	20900	24000	32400	54300	11600	21700	14300	7320	7500	4750	4640	7400
MIN	5840	6650	7800	8070	5870	6420	5640	4570	4640	3880	4280	4730
AC-FT	557800	720700	899400	1644000	450400	619700	534400	333800	347000	256500	278700	405200

CAL YR 1979 TOTAL 3862240 MEAN 10580 MAX 35000 MIN 4200 AC-FT 7661000
WTR YR 1980 TOTAL 3552970 MEAN 9708 MAX 54300 MIN 3880 AC-FT 7047000

14166000 WILLAMETTE RIVER AT HARRISBURG, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 24.0°C Aug. 12, 1973; minimum, 0.0°C Jan. 8, 9, 1973.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum not determined; minimum, 3.0°C Jan. 19-22.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	16.0	14.5	12.5	11.5	7.0	6.5	6.0	5.5	5.5	4.5	8.5	8.0
2	15.5	14.5	12.5	11.5	7.5	7.0	6.0	5.0	5.5	5.0	9.0	8.0
3	16.0	15.0	12.0	11.5	7.5	7.0	5.5	5.5	6.5	6.0	9.0	8.5
4	16.0	15.0	12.0	11.5	8.0	7.5	5.5	5.5	6.0	5.5	9.0	8.5
5	16.0	15.0	12.0	11.5	8.0	7.0	6.5	5.5	6.5	6.0	9.5	9.0
6	16.0	15.0	12.0	11.0	7.5	7.0	6.5	4.0	7.0	6.5	9.5	8.5
7	15.0	14.5	11.5	10.5	7.0	6.5	5.5	4.5	6.5	6.0	9.5	8.5
8	16.0	14.5	12.0	10.5	7.0	6.5	4.5	4.0	6.5	6.0	9.5	9.0
9	16.0	15.0	11.5	10.5	7.0	6.5	5.0	4.0	6.5	5.5	9.0	8.5
10	16.0	15.0	11.5	10.0	7.0	6.0	4.5	4.0	6.5	5.5	9.0	8.5
11	16.0	15.0	11.0	10.0	7.0	5.0	4.5	3.5	6.5	5.5	9.0	8.5
12	15.5	15.0	11.0	10.0	5.5	5.0	5.5	3.5	6.5	5.5	9.0	7.5
13	15.5	15.0	10.0	9.5	5.5	5.0	5.5	5.0	6.5	5.5	8.0	7.5
14	15.5	15.5	9.5	8.5	6.0	5.5	6.0	5.5	6.5	5.5	8.5	7.5
15	16.0	15.0	9.5	8.5	6.0	5.5	6.0	5.0	7.0	5.0	8.0	7.5
16	16.0	15.5	9.0	9.0	6.5	5.0	5.5	5.0	6.5	4.0	8.5	7.0
17	16.0	14.5	9.5	9.0	6.0	5.0	5.5	5.0	7.0	4.0	8.5	8.0
18	15.0	14.5	9.5	9.0	6.0	6.0	5.5	4.0	9.5	5.5	8.5	8.0
19	14.5	13.5	9.0	7.5	6.0	6.0	5.0	3.0	7.5	7.0	8.5	8.5
20	14.0	13.5	8.5	7.5	6.5	6.0	5.0	3.0	8.0	7.0	9.0	8.5
21	13.5	12.5	8.0	7.5	6.5	6.0	5.0	3.0	8.0	7.0	9.0	8.0
22	13.5	13.5	8.0	7.5	6.5	5.0	4.5	3.0	7.5	7.0	9.0	8.0
23	14.5	13.5	8.0	7.0	6.0	5.0	7.0	4.0	7.0	6.5	9.0	8.5
24	14.5	14.0	8.0	7.5	5.5	4.5	7.0	6.0	8.0	7.0	9.5	8.5
25	14.5	14.0	8.0	7.5	5.5	5.0	6.5	6.0	8.5	8.0	10.0	9.0
26	14.5	13.5	7.5	6.5	5.5	4.5	6.5	6.0	8.5	8.0	10.0	9.0
27	14.5	13.5	7.5	6.5	5.5	4.5	6.0	5.0	8.5	8.5	9.5	8.5
28	14.0	13.0	7.0	6.0	4.5	4.0	5.5	4.5	9.0	8.5	10.0	8.5
29	13.5	13.0	7.0	6.0	4.5	4.0	4.5	4.0	9.0	8.0	9.5	9.5
30	13.5	12.5	7.0	6.5	5.0	4.5	5.5	4.0	---	---	9.5	8.5
31	13.0	12.5	---	---	5.5	4.5	5.0	4.5	---	---	9.5	9.0
MONTH	16.0	12.5	12.5	6.0	8.0	4.0	7.0	3.0	9.5	4.0	10.0	7.0

14166000 WILLAMETTE RIVER AT HARRISBURG, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.5	8.5	15.0	13.0								
2	---	---	14.5	12.0								
3	---	---	---	---								
4	---	---	---	---								
5	---	---	---	---								
6	10.5	8.5	---	---								
7	10.0	9.0	---	---								
8	10.0	9.0	---	---								
9	10.5	9.5	---	---								
10	10.5	9.5	---	---								
11	11.0	10.0	---	---								
12	12.0	10.5	---	---								
13	12.5	11.5	---	---								
14	12.0	11.5	---	---								
15	12.0	11.0	---	---								
16	13.0	11.5	---	---								
17	13.0	12.0	---	---								
18	13.0	11.5	---	---								
19	13.0	12.5	---	---								
20	12.5	12.0	---	---								
21	12.0	11.0	---	---								
22	11.5	11.0	---	---								
23	12.5	11.5	---	---								
24	13.0	12.0	---	---								
25	13.5	12.0	---	---								
26	15.0	12.5	---	---								
27	16.0	13.5	---	---								
28	15.5	14.5	---	---								
29	14.5	13.0	---	---								
30	14.5	12.5	---	---								
31	---	---	---	---								
MONTH	16.0	8.5	15.0	12.0								

14166500 LONG TOM RIVER NEAR NOTI, OR

LOCATION.--Lat 44°03'00", long 123°25'30", in sec.33, T.17 S., R.6 W., Lane County, Hydrologic Unit 17090003, on left bank 0.2 mi (0.3 km) upstream from Southern Pacific Railroad bridge, 0.8 mi (1.3 km) downstream from Noti Creek, 1.3 mi (2.1 km) southeast of Noti, and at mile 37.4 (60.2 km).

DRAINAGE AREA.--89.3 mi^2 (231.3 km^2).

PERIOD OF RECORD.--October 1935 to current year.

REVISED RECORDS.--WSP 1318: 1936(M). WSP 1738: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 389.05 ft (118.582 m) National Geodetic Vertical Datum of 1929 (levels by U.S. Weather Bureau). Prior to Nov. 6, 1940, nonrecording gage at same site and datum.

REMARKS.--Records good. Slight regulation caused by logpond above Noti. No diversion above station.

AVERAGE DISCHARGE.--45 years, 233 ft^3/s (6.599 m^3/s), 35.43 in/yr (900 mm/yr), 168,800 acre-ft/yr (208 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,990 ft^3/s (198 m^3/s) Dec. 22, 1955, gage height, 20.17 ft (6.148 m); minimum, 0.04 ft^3/s (0.001 m^3/s) Aug. 13, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,600 ft^3/s (45.3 m^3/s) and maximum discharge, 2,060 ft^3/s (58.3 m^3/s) Jan. 13, gage height, 13.21 ft (4.026 m); minimum, 8.2 ft^3/s (0.23 m^3/s) Sept. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	138	172	437	223	348	202	158	72	46	17	16
2	14	104	620	419	304	320	190	150	73	46	16	16
3	14	89	1090	373	338	290	181	146	74	44	18	15
4	12	91	831	337	293	280	185	144	76	52	16	14
5	12	199	697	683	264	265	208	129	72	58	15	13
6	14	189	472	625	290	245	425	127	70	52	15	12
7	15	130	361	463	300	231	522	126	78	46	15	12
8	16	104	296	424	277	219	432	121	79	42	14	11
9	14	89	258	534	258	208	435	126	69	42	14	11
10	12	76	250	771	241	194	438	133	66	42	14	9.7
11	12	70	217	604	225	218	387	122	65	41	12	8.7
12	12	61	197	1140	213	232	339	113	61	40	12	9.2
13	12	57	184	2010	204	405	296	112	74	40	14	15
14	14	58	170	1710	197	1020	270	111	101	38	16	16
15	17	52	156	1420	189	907	262	107	82	35	16	16
16	18	65	154	974	178	663	236	103	70	33	14	14
17	16	79	147	746	184	505	220	97	66	29	13	12
18	27	138	193	585	240	449	205	94	64	29	14	11
19	135	266	221	487	333	385	199	90	59	28	14	12
20	178	202	267	422	314	368	223	89	56	27	13	17
21	174	152	492	374	276	361	343	86	52	27	12	19
22	89	175	606	337	288	328	336	89	51	24	11	18
23	91	357	488	308	423	299	284	98	51	24	12	14
24	74	563	536	283	412	273	258	97	56	24	12	12
25	128	522	446	266	358	266	231	91	68	23	12	11
26	184	437	352	250	438	256	217	86	65	22	14	9.7
27	141	356	295	235	434	252	202	86	56	22	13	9.7
28	115	277	261	212	417	226	180	84	44	20	14	9.7
29	97	225	247	202	378	213	174	80	44	18	14	11
30	92	193	241	191	---	208	163	78	47	16	14	11
31	148	---	290	185	---	198	---	74	---	17	15	---
TOTAL	1912	5514	11207	18007	8489	10632	8243	3347	1961	1047	435	385.7
MEAN	61.7	184	362	581	293	343	275	108	65.4	33.8	14.0	12.9
MAX	184	563	1090	2010	438	1020	522	158	101	58	18	19
MIN	12	52	147	185	178	194	163	74	44	16	11	8.7
CFSM	.69	2.06	4.05	6.51	3.28	3.84	3.08	1.21	.73	.38	.16	.14
IN.	.80	2.30	4.67	7.50	3.54	4.43	3.43	1.39	.82	.44	.18	.16
AC-FT	3790	10940	22230	35720	16840	21090	16350	6640	3890	2080	863	765

CAL YR 1979 TOTAL 58913.1 MEAN 161 MAX 1090 MIN 6.8 CFSM 1.80 IN 24.54 AC-FT 116900
WTR YR 1980 TOTAL 71179.7 MEAN 194 MAX 2010 MIN 8.7 CFSM 2.17 IN 29.65 AC-FT 141200

14167000 COYOTE CREEK NEAR CROW, OR

LOCATION.--Lat 44°01'19", long 123°15'17", in SW¼NE¼ sec.11, T.18 S., R.5 W., Lane County, Hydrologic Unit 17090003, on right bank 1.0 mi (1.6 km) downstream from Spencer Creek, 4.3 mi (6.9 km) northeast of Crow, and at mile 3.8 (6.1 km).

DRAINAGE AREA.--95.1 mi² (246.3 km²).

PERIOD OF RECORD.--July 1940 to current year.

REVISED RECORDS.--WSP 1738: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 374.0 ft (114.00 m) National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). Prior to Aug. 31, 1940, nonrecording gage near same site at different datums.

REMARKS.--Records good. No regulation. Several small diversions for irrigation above station.

AVERAGE DISCHARGE.--40 years, 176 ft³/s (4.984 m³/s), 25.13 in/yr (638 mm/yr), 127,500 acre-ft/yr (157 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,600 ft³/s (300 m³/s) Feb. 10, 1961, gage height, 14.43 ft (4.398 m), from rating curve extended above 4,700 ft³/s (133 m³/s); no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,600 ft³/s (45.3 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 14	1930	*2,530	71.6	*11.14	3.395	Mar. 14	0930	1,850	52.4	10.52	3.206

Minimum, 0.04 ft³/s (0.001 m³/s) Sept. 8, 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.70	47	100	375	78	207	83	68	21	9.2	.37	.32
2	.70	36	597	340	115	181	71	62	21	8.7	.37	.42
3	.70	29	1310	330	117	157	65	58	22	9.2	.37	.18
4	.60	26	1150	311	93	183	68	56	22	9.2	.32	.10
5	.65	41	864	1060	83	200	92	53	21	11	.32	.09
6	.70	46	551	872	111	164	311	50	19	9.8	.37	.07
7	.65	38	460	553	101	142	338	47	22	8.7	.59	.06
8	.65	33	320	393	89	125	279	46	23	7.6	.66	.04
9	.66	28	220	401	82	112	342	51	21	6.6	.24	.07
10	.71	24	170	572	77	101	370	55	18	6.2	.13	.15
11	.76	22	130	471	71	162	302	51	16	5.8	.32	.13
12	.76	20	109	1140	67	170	241	49	17	5.4	.81	.15
13	.76	18	94	2340	64	352	192	45	20	5.0	.81	.15
14	3.4	17	82	2130	62	1450	173	42	29	4.3	.66	.18
15	1.1	17	73	1690	60	1480	160	41	24	4.3	.18	.28
16	1.0	19	67	1070	58	961	129	38	12	4.0	.10	.24
17	11	40	65	726	62	619	107	35	16	3.7	.09	.32
18	46	90	83	479	119	452	94	32	16	3.4	.59	.47
19	60	160	98	347	216	331	85	29	13	2.6	.71	.47
20	70	110	127	278	183	295	142	28	13	1.9	.66	.53
21	60	90	346	230	149	273	425	26	13	1.5	.59	.24
22	34	120	480	192	207	218	364	26	11	1.7	.59	.28
23	21	180	466	161	257	181	254	29	12	1.7	.53	.47
24	19	340	532	142	222	155	200	30	14	1.5	.42	.59
25	28	320	368	126	203	136	163	30	16	1.7	.24	.71
26	52	300	259	113	257	128	135	30	18	1.2	.37	.28
27	36	220	201	97	228	116	113	30	16	1.1	.42	.37
28	29	165	167	80	272	95	97	28	13	.97	.18	1.3
29	25	136	146	69	238	85	83	25	10	1.1	.15	1.5
30	26	117	160	80	---	79	73	23	9.8	.86	.12	.86
31	50	---	292	75	---	77	---	22	---	.53	.12	---
TOTAL	581.50	2849	10087	17243	3941	9387	5551	1235	518.8	140.46	12.40	11.02
MEAN	18.8	95.0	325	556	136	303	185	39.8	17.3	4.53	.40	.37
MAX	70	340	1310	2340	272	1480	425	68	29	11	.81	1.5
MIN	.60	17	65	69	58	77	65	22	9.8	.53	.09	.04
CFSM	.20	1.00	3.42	5.85	1.43	3.19	1.95	.42	.18	.05	.004	.004
IN.	.23	1.11	3.95	6.74	1.54	3.67	2.17	.48	.20	.05	.00	.00
AC-FT	1150	5650	20010	34200	7820	18620	11010	2450	1030	279	25	22

CAL YR 1979	TOTAL	45215.21	MEAN 124	MAX 1310	MIN .00	CFSM 1.30	IN 17.69	AC-FT 89680		
WTR YR 1980	TOTAL	51557.18	MEAN 141	MAX 2340	MIN .04	CFSM 1.48	IN 20.17	AC-FT 102300		

14168000 FERN RIDGE LAKE NEAR ELMIRA, OR

LOCATION.--Lat 44°07'15", long 123°18'00", near center of sec.4, T.17 S., R.5 W., Lane County, Hydrologic Unit 17090003, in control house at spillway section of dam across Long Tom River and Coyote Creek, 4.5 mi (7.2 km) northeast of Elmira, and at mile 25.7 (41.4 km).

DRAINAGE AREA.--252 mi^2 (653 km^2), not including Amazon Creek basin (see REMARKS).

PERIOD OF RECORD.--October 1941 to current year. Prior to October 1971, published as Fern Ridge Reservoir near Elmira.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by earth-fill dam with concrete outlet and spillway, completed in 1941 by Corps of Engineers; storage began Nov. 13, 1941. Total capacity, 116,800 acre-ft (144 hm^3) at elevation 375.1 ft (114.33 m), maximum pool elevation. Usable capacity, 101,100 acre-ft (125 hm^3) between elevations 340.0 ft (103.63 m), sill of outlet gate, and 373.5 ft (113.84 m), normal maximum operating pool level. Reservoir used for flood control and improvement of navigation. Since November 1951, most of flow of Amazon Creek has been diverted in SE¼ sec.29, T.17 S., R.4 W., and discharged into Fern Ridge Reservoir; drainage area at point of diversion, 21.3 mi^2 (55.2 km^2).

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 124,500 acre-ft (154 hm^3) Dec. 27, 1955, elevation, 375.83 ft (114.553 m); minimum since first filling in 1942, 163 acre-ft (201,000 m^3) Nove. 11, 1950, elevation, 344.00 ft (104.851 m).

EXTREMES FOR CURRENT YEAR.--Maximum observed contents, 105,800 acre-ft (130 hm^3) May 12-18, elevation, 374.00 ft (113.995 m); minimum, 7,060 acre-ft (8.70 hm^3) Nov. 28, elevation, 352.92 ft (107.570 m).

Capacity table (elevation, in feet, and usable contents, in acre-feet)

349	2,270	356	12,440	364	37,490	372	87,720
350	3,250	358	17,020	366	46,940	374	105,800
352	5,730	360	22,670	368	58,320	376	126,300
354	8,760	362	29,460	370	71,900		

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	371.69	362.47	353.19	353.56	357.09	366.60	371.69	373.70	373.93	373.84	373.13	372.16
2	371.67	361.98	355.81	353.39	357.47	366.84	371.76	373.70	373.93	373.82	373.10	372.12
3	371.66	361.43	356.92	353.15	357.99	367.04	371.84	373.70	373.94	373.83	373.06	372.10
4	371.64	360.95	357.04	353.66	358.39	367.25	371.91	373.80	373.94	373.81	372.02	372.08
5	371.62	360.44	356.40	355.69	358.79	367.45	372.04	373.80	373.93	373.80	372.99	372.05
6	371.60	359.93	354.94	356.39	359.22	367.62	372.37	373.80	373.94	373.79	372.95	372.02
7	371.59	359.41	353.57	356.33	359.61	367.76	372.57	373.80	373.97	373.79	372.93	371.98
8	371.57	358.91	353.14	355.94	359.93	367.90	372.68	373.80	373.95	373.77	372.89	371.96
9	371.47	358.36	353.14	355.77	360.22	368.02	372.83	373.90	373.94	373.75	372.86	371.93
10	371.24	357.76	353.04	354.76	360.50	368.15	372.95	373.90	373.93	373.74	372.84	371.90
11	370.85	357.10	353.08	353.41	360.74	368.35	372.04	373.90	373.92	373.72	372.79	371.87
12	370.42	356.38	353.18	356.47	360.95	368.55	373.11	374.00	373.92	373.70	372.76	371.86
13	369.98	355.56	353.23	360.38	361.14	368.97	373.14	374.00	373.97	373.68	372.74	371.83
14	369.53	354.75	353.19	363.38	361.32	369.86	373.24	374.00	373.93	373.67	372.70	371.81
15	369.04	354.28	353.17	364.70	361.48	370.31	373.40	374.00	373.93	373.65	372.67	371.78
16	368.55	354.30	353.13	364.86	361.62	370.37	373.40	374.00	373.93	373.63	372.64	371.76
17	368.05	354.30	353.19	364.27	361.84	370.44	373.40	374.00	373.92	373.59	372.61	371.72
18	367.78	354.60	353.27	363.03	362.16	370.55	373.40	374.00	373.91	373.58	372.58	371.70
19	367.43	354.81	353.27	361.47	362.60	370.67	373.40	373.95	373.91	373.54	372.55	371.70
20	367.09	354.79	353.46	359.48	362.97	370.82	373.60	373.95	373.90	373.53	372.52	371.68
21	366.64	354.60	353.72	358.34	363.25	370.91	373.60	373.95	373.88	373.51	372.49	371.65
22	366.24	354.91	353.86	357.88	363.68	370.93	373.60	373.97	373.88	373.47	372.45	371.62
23	365.88	354.85	354.04	357.53	364.12	370.96	373.60	373.97	373.87	373.44	372.42	371.58
24	365.58	354.47	354.10	357.26	364.51	371.00	373.60	373.96	373.91	373.41	372.39	371.56
25	365.20	353.67	353.62	357.13	364.91	371.06	373.60	373.95	373.91	373.37	372.37	371.54
26	364.79	353.26	353.30	356.97	365.31	371.17	373.60	373.94	373.90	373.34	372.33	371.52
27	364.45	353.03	353.26	356.96	365.66	371.27	373.60	373.94	373.89	373.31	372.30	371.49
28	364.11	353.10	353.19	356.99	366.02	371.36	373.60	373.93	373.88	373.27	372.27	371.47
29	363.68	353.11	353.13	357.00	366.34	371.45	373.60	373.93	373.85	373.23	372.24	371.45
30	363.29	353.09	353.32	356.98	---	371.52	373.70	373.93	373.85	373.18	372.21	371.39
31	362.91	---	353.44	356.99	---	371.61	---	373.94	---	373.17	372.18	---
MEAN	368.30	356.35	353.82	357.75	361.72	369.57	373.03	373.91	373.92	373.58	372.61	371.78
MAX	371.69	362.47	357.04	364.86	366.34	371.61	373.70	374.00	373.97	373.84	373.13	372.16
MIN	362.91	353.03	353.04	353.15	357.09	366.60	371.69	373.70	373.85	373.17	372.02	371.39
(†)	39960	7310	7850	14580	48730	85290	103000	105200	104400	98020	89260	82660
(‡)	-45330	-32650	+540	+6730	+34150	+36560	+17710	+2200	-800	-6380	-8760	-6600

CAL YR 1979 MEAN 366.97 MAX 373.97 MIN 352.75 AC-FT‡ +780
WTR YR 1980 MEAN 367.21 MAX 374.00 MIN 353.03 AC-FT‡ -2630

† Contents, in acre-feet, at 2400, on last day of month.
‡ Change in contents, in acre-feet.

14169001 LONG TOM RIVER NEAR ALVADORE, OR

LOCATION.--Lat 44°07'25", long 123°17'55", in SW¼NE¼ sec.4, T.17 S., R.5 W., Lane County, Hydrologic Unit 17090003, on left bank 0.2 mi (0.3 km) downstream from Fern Ridge Dam, 1.7 mi (2.7 km) west of Alvadore, and at mile 25.5 (41.0 km).

DRAINAGE AREA.--252 mi² (653 km²), not including Amazon Creek basin.

PERIOD OF RECORD.--August 1939 to current year. Prior to October 1943, published as "at Smithfield," and October 1943 to September 1959, as "below Fern Ridge Dam, near Smithfield."

REVISED RECORDS.--WSP 1248: 1940-41, 1948.

GAGE.--Water-stage recorder and masonry control. Datum of gage is 332.00 ft (101.194 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Sept. 21, 1939, nonrecording gage and Sept. 21, 1939, to Sept. 30, 1943, water-stage recorder at site 2.5 mi (4.0 km) downstream at datum 11.09 ft (3.380 m) lower.

REMARKS.--Records excellent. Flow regulated since 1941 by Fern Ridge Lake (see station 14168000). Several small diversions for irrigation above station. Records include diversion to Coyote Creek Channel. Point of diversion is 500 ft (152 m) upstream and point of return, 2.3 mi (3.7 km) downstream. Discharge not adjusted for storage or release from Fern Ridge Lake as evaporation from reservoir at times exceeds natural flow and diversions, and beginning in November 1951, most of flow of Amazon Creek has been diverted into Fern Ridge Lake.

AVERAGE DISCHARGE.--41 years, 530 ft³/s (15.01 m³/s), 384,000 acre-ft/yr (473 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,500 ft³/s (326 m³/s) Jan. 1, 1943, gage height, 15.12 ft (4.609 m), site and datum then in use; minimum daily, 2 ft³/s (0.057 m³/s) Aug. 7, 1941.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,140 ft³/s (117 m³/s) Jan. 18; minimum daily, 41 ft³/s (1.16 m³/s) Feb. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	1020	351	1020	386	52	53	90	60	55	81	78
2	50	1030	784	1110	284	52	53	57	60	65	80	78
3	50	1030	2030	1060	78	52	53	57	58	70	80	78
4	50	1020	2870	865	75	52	54	55	60	64	80	78
5	50	1000	2740	1120	73	54	53	55	60	62	80	78
6	50	1000	2670	1300	67	53	54	79	60	62	80	78
7	50	895	1850	1400	65	51	326	102	107	62	80	78
8	50	801	961	1490	53	52	491	154	131	62	80	78
9	368	800	583	1520	42	51	491	58	107	60	80	78
10	924	800	590	2390	44	51	491	57	69	60	80	78
11	1410	806	432	2570	44	52	441	57	60	60	78	78
12	1560	793	328	1210	45	52	403	57	62	60	78	78
13	1560	806	328	114	41	52	413	57	188	60	78	79
14	1570	717	328	123	42	685	220	131	240	60	78	80
15	1570	411	301	1310	45	1790	52	164	112	60	78	80
16	1560	195	283	2610	47	1990	227	133	66	60	78	78
17	1560	195	257	3410	47	1300	349	90	66	60	78	78
18	1410	198	342	4020	45	795	276	75	66	60	78	77
19	1450	315	427	4040	46	553	220	75	66	60	78	75
20	1510	411	505	4010	45	408	308	75	65	60	78	75
21	1500	406	994	2550	46	535	864	75	70	60	79	75
22	1250	406	1290	1260	46	629	967	97	61	69	79	75
23	1000	923	1300	999	49	507	611	136	65	84	79	75
24	1000	1770	1300	840	50	408	456	148	63	81	79	74
25	1200	1960	1300	651	51	281	429	151	53	81	79	74
26	1110	1510	992	555	140	142	373	151	55	80	79	74
27	1000	1000	668	443	205	73	307	112	55	80	78	77
28	995	601	577	347	114	60	281	95	55	80	78	77
29	987	487	525	306	51	58	177	68	55	81	78	77
30	995	454	532	305	---	53	133	58	55	82	78	77
31	1020	---	761	305	---	53	---	59	---	81	78	---
TOTAL	28909	23760	29199	45253	2366	10996	9626	2828	2350	2081	2445	2313
MEAN	933	792	942	1460	81.6	355	321	91.2	78.3	67.1	78.9	77.1
MAX	1570	1960	2870	4040	386	1990	967	164	240	84	81	80
MIN	50	195	257	114	41	51	52	55	53	55	78	74
AC-FT	57340	47130	57920	89760	4690	21810	19090	5610	4660	4130	4850	4590

CAL YR 1979 TOTAL 139151 MEAN 381 MAX 2870 MIN 28 AC-FT 276000
WTR YR 1980 TOTAL 162126 MEAN 443 MAX 4040 MIN 41 AC-FT 321600

14169500 AMAZON CREEK NEAR EUGENE, OR

LOCATION.--Lat 44°03'40", long 123°11'40", in SE¼ sec.29, T.17 S., R.4 W., Lane County, Hydrologic Unit 17090003, on right bank 250 ft (76 m) upstream from diversion structure, 5 mi (8 km) west of Eugene, and at mile 12.3 (19.8 km).

DRAINAGE AREA.--21.3 mi² (55.2 km²).

PERIOD OF RECORD.--October 1954 to September 1968, October 1979 to September 1980.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 372.41 ft (113.511 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. During summer and fall, several diversions by pumping for irrigation; natural flow (if any) may be augmented slightly by return flow in and below city of Eugene. Records include diversion at station to Fern Ridge Lake.

AVERAGE DISCHARGE.--15 years, 29.0 ft³/s (0.821 m³/s), 18.49 in/yr (470 mm/yr), 21,010 acre-ft/yr (25.9 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,070 ft³/s (86.9 m³/s) Feb. 10, 1961, gage height, 9.58 ft (2.920 m); no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 800 ft³/s (22.7 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 2	1230	*1,000	28.3	*8.04	2.451	Mar. 14	0230	973	27.6	7.97	2.429
Jan. 12	1900	802	22.7	7.54	2.298						

Minimum, 0.51 ft³/s (0.014 m³/s) Oct. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.96	27	28	60	33	25	29	5.0	2.6	1.6	1.8	1.2
2	.93	14	411	39	34	23	26	4.5	3.5	1.6	1.9	1.5
3	.79	6.3	250	45	32	22	26	4.0	4.3	1.7	1.8	2.1
4	.81	8.5	166	86	28	28	30	3.8	4.2	7.1	1.7	1.2
5	.81	33	64	299	27	32	37	3.5	2.5	2.2	1.8	1.1
6	.76	17	44	65	38	24	78	3.3	2.3	1.6	1.6	1.1
7	.87	6.6	37	49	30	21	48	3.3	4.9	1.6	1.5	1.1
8	.87	4.0	32	53	27	21	41	4.1	11	1.7	1.5	1.2
9	.69	3.1	29	73	26	19	64	21	2.8	1.7	1.6	1.1
10	.79	2.6	31	80	24	23	49	11	2.2	27	1.5	1.1
11	.99	2.3	26	59	24	38	34	8.6	2.1	2.6	1.5	1.1
12	.87	2.1	23	432	23	33	30	3.6	2.2	1.8	1.6	1.2
13	.81	2.1	17	242	22	107	27	3.1	22	1.7	1.6	4.6
14	5.9	2.0	13	270	22	355	31	3.5	7.8	1.7	1.6	1.3
15	5.6	7.4	9.6	82	21	123	26	3.0	2.5	1.7	1.5	1.1
16	1.2	28	7.8	80	20	64	24	2.8	2.0	1.5	1.5	1.1
17	.99	28	7.8	59	26	50	22	3.1	2.2	1.5	1.4	1.0
18	21	51	28	47	34	45	21	2.8	2.0	1.5	1.4	1.2
19	94	54	30	41	39	38	20	2.8	1.9	1.5	1.4	1.2
20	64	29	35	38	31	42	51	2.7	1.9	1.6	1.2	1.2
21	31	21	76	35	24	37	69	2.8	2.0	1.6	1.3	2.2
22	11	49	47	33	40	35	24	3.0	1.8	1.7	1.3	.99
23	25	67	72	32	33	32	19	5.0	2.9	1.7	1.4	.84
24	21	108	52	30	26	31	13	20	4.3	1.5	1.3	.90
25	47	67	37	30	30	30	10	8.1	9.2	1.6	1.3	.93
26	26	66	31	28	37	33	9.0	2.7	6.8	1.8	1.3	.90
27	23	41	28	27	30	31	8.0	5.9	2.0	1.8	1.3	.90
28	26	32	26	25	41	28	6.5	2.5	1.7	1.8	1.4	.93
29	19	28	25	24	28	27	6.0	2.2	1.7	1.8	1.3	.90
30	26	30	37	23	---	27	5.5	2.0	1.8	2.0	1.2	.87
31	54	---	51	23	---	31	---	2.0	---	1.8	1.3	---
TOTAL	512.64	837.0	1771.2	2509	850	1475	884.0	155.7	121.1	84.0	45.8	38.06
MEAN	16.5	27.9	57.1	80.9	29.3	47.6	29.5	5.02	4.04	2.71	1.48	1.27
MAX	94	108	411	432	41	355	78	21	22	27	1.9	4.6
MIN	.69	2.0	7.8	23	20	19	5.5	2.0	1.7	1.5	1.2	.84
CFSM	.78	1.31	2.68	3.80	1.38	2.24	1.39	.24	.19	.13	.07	.06
IN.	.90	1.46	3.09	4.38	1.48	2.58	1.54	.27	.21	.15	.08	.07
AC-FT	1020	1660	3510	4980	1690	2930	1750	309	240	167	91	75

WTR YR 1980 TOTAL 9283.50 MEAN 25.4 MAX 432 MIN .69 CFSM 1.19 IN 16.21 AC-FT 18410

14170000 LONG TOM RIVER AT MONROE, OR

LOCATION.--Lat 44°18'50", long 123°17'45", in NE¼ sec.33, T.14 S., R.5 W., Benton County, Hydrologic Unit 17090003, on left bank in canalized river channel at Monroe, 110 ft (34 m) upstream from bridge on State Highway 99W, 0.1 mi (0.2 km) downstream from Shafer Creek, and at mile 6.8 (10.9 km).

DRAINAGE AREA.--391 mi² (1,013 km²).

PERIOD OF RECORD.--November 1920 to July 1921, October 1921 to April 1926, November 1926 to May 1927, October 1927 to current year. Prior to October 1930, published as "near Monroe."

REVISED RECORDS.--WSP 654: Drainage area. WSP 1248: 1923, 1927, 1928(M). WSP 1288: 1952.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 270.57 ft (82.470 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 24, 1944, nonrecording gage at various sites ranging from present site to 1.5 mi (2.4 km) downstream at different datums.

REMARKS.--Records good except those for periods of no gage-height record Dec. 25 to Feb. 20, May 6 to June 12, July 5-7, which are fair. Flow regulated since 1941 by Fern Ridge Lake (see station 14168000). Several small diversions above station.

AVERAGE DISCHARGE.--57 years (water years 1922-25, 1928-80), 767 ft³/s (21.72 m³/s), 555,700 acre-ft/yr (685 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,300 ft³/s (547 m³/s) Jan. 2, 1943, gage height, 17.14 ft (5.224 m), site and datum then in use, from graph based on gage readings, includes some overflow from Willamette River near Junction City; no flow Oct. 20-22, 1944 (water filling pool at gage); minimum observed prior to regulation, 7 ft³/s (0.20 m³/s) Sept. 29, Oct. 1, 1939.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,880 ft³/s (138 m³/s) Dec. 4, gage height, 8.12 ft (2.475 m); minimum, 19 ft³/s (0.54 m³/s) July 22, 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	1180	562	1600	550	399	215	241	90	54	39	57
2	52	1150	1990	1700	900	360	199	170	100	42	44	57
3	49	1160	3440	1700	500	329	189	165	100	49	47	54
4	49	1150	4310	1600	400	298	199	160	110	63	47	54
5	49	1240	3860	2600	300	322	241	151	90	60	37	57
6	49	1200	3600	2300	320	298	784	147	90	60	42	54
7	52	1100	2750	2000	420	258	774	180	85	55	39	57
8	52	905	1690	2200	320	241	946	170	160	42	39	54
9	147	895	895	2200	280	231	1030	150	160	39	42	49
10	697	875	936	2800	260	231	977	150	100	35	44	52
11	1280	885	774	4200	240	286	834	150	70	39	44	49
12	1570	865	536	3400	220	286	697	140	60	49	42	52
13	1610	855	511	2800	190	605	669	150	109	44	44	57
14	1610	834	495	1600	190	2280	579	130	310	44	44	57
15	1630	562	463	1800	190	2960	275	220	209	37	44	57
16	1610	263	419	3400	180	2920	298	220	98	30	49	54
17	1620	286	399	4000	190	2260	553	150	84	30	52	60
18	1540	405	528	4700	300	1310	447	120	71	35	52	66
19	1520	614	697	4600	450	1070	392	120	68	35	49	66
20	1740	614	814	4500	380	814	455	120	63	35	44	68
21	1710	545	1730	4400	298	895	1160	130	63	32	47	68
22	1520	650	2070	2000	399	988	1460	130	63	22	49	66
23	1120	1220	2150	1400	614	875	977	160	60	24	47	66
24	1100	2650	2260	1300	432	641	669	200	77	42	52	66
25	1280	2760	2000	1000	419	562	632	220	87	39	52	63
26	1380	2450	1700	800	855	379	536	220	77	42	47	63
27	1160	1540	1200	700	764	292	487	200	66	44	47	63
28	1130	1010	900	550	774	236	412	140	57	47	47	66
29	1110	697	850	550	487	220	354	140	54	39	49	66
30	1130	659	700	550	---	209	252	95	57	35	49	66
31	1180	---	1200	550	---	204	---	90	---	35	54	---
TOTAL	30798	31219	46429	69500	11822	23259	17692	4929	2888	1278	1424	1784
MEAN	993	1041	1498	2242	408	750	590	159	96.3	41.2	45.9	59.5
MAX	1740	2760	4310	4700	900	2960	1460	241	310	63	54	68
MIN	49	263	399	550	180	204	189	90	54	22	37	49
AC-FT	61090	61920	92090	137900	23450	46130	35090	9780	5730	2530	2820	3540

CAL YR 1979 TOTAL 204495 MEAN 560 MAX 4310 MIN 28 AC-FT 405600
WTR YR 1980 TOTAL 243022 MEAN 664 MAX 4700 MIN 22 AC-FT 482000

14171000 MARYS RIVER NEAR PHILOMATH, OR

LOCATION.--Lat 44°31'35", long 123°20'00", in NE¼SE¼ sec.18, T.12 S., R.5 W., Benton County, Hydrologic Unit 17090003, on left bank 50 ft (15 m) downstream from bridge on Bellfountain Road, 0.6 mi (1.0 km) downstream from Newton Creek, 2.0 mi (3.2 km) southeast of Philomath, and at mile 9.4 (15.1 km).

DRAINAGE AREA.--159 mi² (412 km²), including drainage area of Evergreen Creek above Bellfountain Road, 1.4 mi (2.3 km) south of station.

PERIOD OF RECORD.--October 1940 to current year.

REVISED RECORDS.--WSP 1218: Drainage area. WSP 1935: 1956(M).

GAGE.--Water-stage recorder. Datum of gage is 224.01 ft (68.278 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Oct. 1, 1961, nonrecording gage at bridge 50 ft (15 m) upstream at same datum.

REMARKS.--Records good. Records include flow of Evergreen Creek at Bellfountain Road crossing 1.4 mi (2.3 km) south of station, with which overflow from Marys River may at times be mingled. Slight regulation by small storage reservoir on Rock Creek from which municipal supply is diverted for city of Corvallis. Other small diversions above station for irrigation.

AVERAGE DISCHARGE.--40 years, 457 ft³/s (12.94 m³/s), 39.03 in/yr (991 mm/yr), 331,100 acre-ft/yr (408 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,600 ft³/s (385 m³/s) Dec. 22, 1964, gage height, 20.72 ft (6.315 m); maximum gage height, 20.91 ft (6.373 m) Jan. 15, 1974; minimum discharge, 0.60 ft³/s (0.017 m³/s) Aug. 23, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,200 ft³/s (90.6 m³/s) and maximum discharge, 7,160 ft³/s (205 m³/s) Jan. 13, gage height, 20.52 ft (6.254 m); minimum, 8.5 ft³/s (0.24 m³/s) Sept. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	229	335	970	342	625	354	293	91	46	18	13
2	15	171	1310	813	494	565	323	272	96	44	18	12
3	15	190	1380	728	586	517	303	258	99	46	19	12
4	13	179	1560	690	487	476	304	244	99	51	18	13
5	14	250	1450	1290	436	477	374	231	91	51	18	14
6	14	245	1000	1090	599	449	958	220	86	48	18	52
7	14	191	746	872	654	403	1160	203	90	43	17	13
8	16	174	590	938	568	374	970	194	89	40	16	12
9	16	160	499	1810	514	345	928	198	81	38	15	11
10	15	150	486	2380	468	331	915	190	78	38	16	10
11	14	135	408	1930	426	416	826	178	75	37	14	9.7
12	14	120	392	5260	389	526	726	167	72	36	16	11
13	13	110	388	5960	361	980	633	161	88	35	15	13
14	14	100	358	4700	339	1700	584	154	131	34	14	13
15	15	95	332	3230	318	1510	599	147	110	33	14	13
16	14	100	304	2330	301	1210	526	141	88	31	14	12
17	15	110	306	1690	326	1030	473	134	80	31	14	11
18	18	150	535	1250	612	1070	435	127	75	29	14	12
19	73	280	800	1010	761	905	408	123	70	29	13	12
20	259	270	1400	841	633	874	526	117	67	28	13	15
21	237	240	1900	718	547	798	756	114	63	26	12	16
22	102	220	1800	625	528	698	720	116	63	26	12	18
23	178	400	1770	554	521	625	623	124	63	25	12	17
24	128	700	1820	499	494	563	556	120	66	25	11	15
25	399	850	1300	456	528	512	495	113	73	24	11	15
26	500	800	968	418	807	484	442	116	72	22	11	14
27	342	740	771	375	779	477	400	119	63	21	11	14
28	277	600	642	338	765	420	364	112	58	20	12	13
29	220	460	552	270	696	386	338	103	53	19	11	13
30	202	395	509	312	---	366	312	97	50	19	11	14
31	267	---	579	290	---	357	---	92	---	19	13	---
TOTAL	3447	8814	27190	44637	15279	20469	17331	4978	2380	1014	441	432.7
MEAN	111	294	877	1440	527	660	578	161	79.3	32.7	14.2	14.4
MAX	500	850	1900	5960	807	1700	1160	293	131	51	19	52
MIN	13	95	304	270	301	331	303	92	50	19	11	9.7
CFSM	.70	1.85	5.52	9.06	3.31	4.15	3.64	1.01	.50	.21	.09	.09
IN.	.81	2.06	6.36	10.44	3.57	4.79	4.05	1.16	.56	.24	.10	.10
AC-FT	6840	17480	53930	88540	30310	40600	34380	9870	4720	2010	875	858

CAL YR 1979 TOTAL 121438.0 MEAN 333 MAX 2520 MIN 12 CFSM 2.09 IN 28.41 AC-FT 240900
WTR YR 1980 TOTAL 146412.7 MEAN 400 MAX 5960 MIN 9.7 CFSM 2.52 IN 34.25 AC-FT 290400

14171750 WILLAMETTE RIVER ABOVE CALAPOOIA RIVER, AT ALBANY, OR

LOCATION.--Lat 44°38'30", long 123°07'00", in NW¼ sec.1, T.11 S., R.4 W., Benton County, Hydrologic Unit 17090003, temperature recorder on left bank, 0.6 mi (1.0 km) upstream from gaging station at Albany, 0.4 mi (0.6 km) upstream from Calapooia River, and at mile 119.9 (192.9 km).

DRAINAGE AREA.--4,460 mi² (11,600 km²), approximately.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1963 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 23.5°C Aug. 3, 1977; minimum, 0.5°C Jan. 26, 1969, Dec. 11, 1972.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 23.0°C July 21, 22; minimum, 2.0°C Jan. 28-31.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	17.0	16.0	12.5	12.0	7.5	7.0	7.5	7.0	4.5	2.5	9.0	8.5
2	17.0	16.0	12.5	12.0	8.5	7.5	7.0	7.0	5.0	4.5	9.0	8.5
3	17.0	16.0	12.5	12.0	9.0	8.5	7.0	7.0	6.0	5.0	9.5	9.0
4	17.0	16.0	12.5	12.0	9.0	9.0	7.0	6.5	6.0	5.5	9.5	9.0
5	17.0	16.0	12.5	12.0	9.0	8.5	7.0	6.5	6.0	5.5	10.0	9.5
6	17.0	16.0	12.5	11.0	8.5	8.0	6.5	5.5	6.5	6.0	9.5	9.5
7	16.5	15.5	12.0	11.0	8.0	8.0	5.5	5.0	6.5	6.0	9.5	9.0
8	16.0	15.5	11.5	10.5	8.0	7.5	5.5	5.0	6.5	6.0	10.0	9.0
9	16.5	15.5	11.5	10.5	8.0	7.5	5.5	5.5	6.0	5.5	9.5	9.0
10	16.5	15.5	11.0	10.5	8.0	7.5	5.5	4.5	6.5	5.5	9.0	9.0
11	17.0	15.5	10.5	10.0	7.5	6.5	4.5	4.5	6.0	5.5	9.0	8.5
12	16.5	16.0	10.0	9.5	6.5	6.0	6.5	4.5	6.0	5.5	8.5	7.5
13	16.5	15.5	9.5	9.0	6.5	6.0	7.5	6.5	6.0	5.5	7.5	7.5
14	16.5	15.5	9.5	9.0	7.0	6.5	7.5	7.5	5.5	5.0	7.5	7.0
15	17.0	15.0	9.0	8.5	7.5	7.0	7.5	7.0	5.5	5.5	7.0	7.0
16	16.5	16.0	9.5	9.0	7.0	6.5	7.0	7.0	6.0	5.5	7.5	7.0
17	16.5	15.0	10.0	9.5	7.0	6.5	7.0	6.5	6.0	5.5	8.0	7.5
18	15.5	14.5	10.0	9.5	8.0	7.0	6.5	5.5	7.0	6.0	8.0	7.5
19	14.5	14.0	9.5	8.5	8.0	8.0	5.5	5.0	7.5	7.0	8.5	8.0
20	14.0	12.5	8.5	8.0	8.0	8.0	5.0	4.5	8.0	7.5	9.0	8.5
21	13.0	12.5	8.0	7.5	8.0	7.5	5.0	5.0	7.5	7.0	8.5	8.0
22	13.5	13.0	8.0	7.5	7.5	7.0	5.0	5.0	7.0	6.5	9.0	8.0
23	14.0	13.5	8.0	8.0	7.0	6.0	5.0	5.0	7.5	7.0	9.0	8.0
24	14.5	14.0	8.0	8.0	6.5	6.0	5.0	5.0	8.0	7.0	9.5	8.5
25	14.5	14.0	8.0	8.0	6.5	6.5	5.5	5.0	8.5	8.0	10.0	9.0
26	14.0	14.0	7.5	7.5	6.5	6.5	5.0	4.5	9.0	8.5	10.0	9.5
27	14.5	14.0	7.5	7.0	6.5	6.0	4.5	3.0	9.5	9.0	9.5	9.0
28	14.0	13.5	7.0	6.5	6.0	5.5	3.0	2.0	9.5	9.0	10.0	9.0
29	13.5	13.0	7.0	6.0	5.5	5.5	2.0	2.0	9.5	9.0	10.0	9.5
30	13.0	13.0	7.0	7.0	6.0	5.5	2.0	2.0	---	---	9.5	9.0
31	13.0	12.5	---	---	7.0	6.0	2.5	2.0	---	---	9.5	9.0
MONTH	17.0	12.5	12.5	6.0	9.0	5.5	7.5	2.0	9.5	2.5	10.0	7.0

14171750 WILLAMETTE RIVER ABOVE CALAPOOIA RIVER, AT ALBANY, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.0	8.5	14.5	12.5	16.0	15.0	19.5	17.5	21.5	19.0	17.5	15.5
2	10.0	8.0	14.0	13.5	15.5	13.5	19.0	18.0	20.5	19.0	18.5	17.0
3	10.0	9.0	15.0	13.0	14.5	13.0	18.5	17.0	20.0	18.5	18.0	16.5
4	10.0	9.5	16.0	14.0	15.0	13.0	17.0	15.5	20.5	18.0	17.5	16.0
5	10.0	9.5	15.5	14.5	15.0	13.5	16.0	15.5	19.0	18.0	18.0	16.0
6	9.5	8.5	15.5	14.0	14.5	13.5	18.0	14.5	20.0	17.5	18.0	16.0
7	9.0	8.5	15.5	13.5	14.0	13.0	19.5	17.0	20.0	17.5	18.0	16.0
8	9.0	8.5	15.0	14.0	15.0	13.0	20.0	18.0	20.0	18.0	18.0	16.5
9	10.0	9.0	14.0	13.5	16.0	14.5	19.0	17.5	20.5	18.5	18.0	16.0
10	10.5	9.5	13.5	12.5	16.0	15.0	19.0	17.0	20.5	18.5	19.0	16.5
11	10.5	9.5	12.5	12.0	16.0	14.5	19.5	18.0	20.5	18.0	18.5	16.0
12	11.5	9.5	12.5	11.5	15.5	14.5	20.5	18.0	19.5	18.0	18.0	16.0
13	12.5	10.5	13.0	11.5	15.0	13.5	21.0	18.5	19.0	18.0	16.5	14.5
14	12.0	11.0	13.5	12.0	14.0	13.0	20.5	19.0	19.5	17.5	15.0	13.5
15	11.5	10.0	14.0	12.5	15.5	13.5	21.5	19.0	19.0	17.0	15.5	14.0
16	12.5	10.5	15.0	12.5	16.0	15.0	22.0	19.5	20.0	18.0	16.5	14.5
17	12.5	11.5	16.0	14.0	16.5	14.5	21.5	19.5	19.0	18.0	16.5	15.0
18	12.5	11.0	17.0	15.0	17.5	15.0	21.5	19.0	18.5	17.5	16.5	15.5
19	12.5	11.5	17.0	15.5	18.5	16.5	21.5	19.0	19.0	16.5	15.5	14.5
20	12.5	10.5	17.0	15.5	18.0	17.0	22.0	19.5	19.0	17.0	15.0	14.0
21	11.5	10.5	17.0	16.0	17.5	16.5	23.0	20.5	19.0	16.5	15.5	14.0
22	11.5	10.0	16.0	14.5	17.5	16.0	23.0	21.0	19.0	17.0	15.0	14.0
23	12.0	10.0	15.0	13.5	17.5	16.5	22.5	20.0	19.0	17.0	15.5	14.0
24	12.5	11.5	14.0	13.0	17.0	15.5	21.5	20.0	19.0	17.5	16.0	14.5
25	12.5	11.5	13.5	12.5	16.5	15.0	21.5	19.5	19.0	16.0	16.0	14.5
26	13.5	11.5	13.0	12.5	16.5	15.0	22.0	19.5	18.5	16.5	16.0	15.0
27	15.0	13.0	13.0	11.0	17.0	15.0	22.5	20.0	18.5	17.0	16.0	15.0
28	15.5	14.5	14.5	11.0	18.0	16.0	22.5	20.5	18.0	16.5	15.5	14.5
29	14.5	13.0	15.0	13.5	18.5	16.5	22.0	20.0	18.0	16.5	16.5	15.0
30	14.0	12.0	16.0	14.0	19.0	17.0	21.5	19.0	17.5	16.0	16.5	15.5
31	---	---	16.0	14.5	---	---	21.5	19.5	17.0	15.5	---	---
MONTH	15.5	8.0	17.0	11.0	19.0	13.0	23.0	14.5	21.5	15.5	19.0	13.5

14172000 CALAPOOIA RIVER AT HOLLEY, OR

LOCATION.--Lat 44°21'05", long 122°47'10", in SE¼ sec.15, T.14 S., R.1 W., Linn County, Hydrologic Unit 17090003, on right bank 200 ft (61 m) downstream from bridge on State Highway 228, 0.3 mi (0.5 km) southwest of Holley, 5.0 mi (8.0 km) upstream from Brush Creek, and at mile 45.4 (73.0 km).

DRAINAGE AREA.--105 mi² (272 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1935 to current year. Prior to October 1963, published as Calapooya River at Holley.

REVISED RECORDS.--WSP 1044: 1943. WSP 1218: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 527.58 ft (160.806 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 7, 1963, nonrecording gage at present site and datum.

REMARKS.--Water-discharge records excellent. Slight regulation at times during low-water periods by small dam upstream. Diversions for irrigation above station.

AVERAGE DISCHARGE.--45 years, 440 ft³/s (12.46 m³/s), 56.91 in/yr (1,446 mm/yr), 318,800 acre-ft/yr (393 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,600 ft³/s (357 m³/s) Dec. 22, 1964, gage height, 14.60 ft (4.450 m); maximum gage height, 15.30 ft (4.663 m) Dec. 22, 1964 (backwater from debris); minimum discharge observed, 13 ft³/s (0.37 m³/s) Sept. 8, 1940.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,400 ft³/s (96.3 m³/s) and maximum discharge, 5,310 ft³/s (150 m³/s) Jan. 12, gage height, 7.29 ft (2.222 m); minimum, 23 ft³/s (0.65 m³/s) Oct. 1-14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	312	374	480	298	514	338	226	203	110	46	36
2	23	220	1590	457	354	448	312	212	217	104	45	50
3	23	176	1660	500	485	416	298	200	354	102	46	53
4	23	223	1580	485	425	495	294	190	438	110	45	39
5	23	412	1280	1460	366	519	354	179	354	106	43	35
6	23	301	898	1080	519	500	460	171	316	99	43	32
7	23	232	695	776	545	438	400	164	301	92	43	31
8	23	192	566	745	461	399	524	157	270	89	42	31
9	23	164	500	926	399	362	856	179	245	85	41	30
10	23	147	555	891	354	342	941	229	220	89	40	29
11	23	132	448	751	323	438	809	235	203	82	39	28
12	23	120	408	3100	294	425	708	212	195	79	38	29
13	23	112	374	4030	274	648	701	195	223	76	38	31
14	26	104	338	3720	257	1530	695	184	212	74	39	31
15	37	99	312	2450	238	1090	666	171	192	73	38	30
16	30	120	287	1600	226	822	566	164	182	70	37	29
17	26	195	274	1300	229	751	529	152	176	67	37	27
18	61	457	264	1000	254	816	466	143	162	66	38	29
19	421	362	281	809	408	726	434	136	152	65	40	37
20	323	291	335	672	421	708	471	130	145	63	38	51
21	257	245	540	576	382	648	555	126	139	61	35	65
22	143	434	598	504	382	566	457	152	134	58	33	50
23	132	738	582	448	485	545	399	162	139	58	33	39
24	110	1190	626	408	430	504	382	159	132	57	32	35
25	209	1030	519	370	403	466	358	209	145	56	33	32
26	198	751	443	338	495	471	327	274	166	54	31	31
27	195	560	391	301	475	452	309	370	147	52	31	29
28	190	457	354	270	576	403	294	305	132	51	32	30
29	169	391	327	248	598	386	270	248	124	48	31	30
30	166	382	316	238	---	378	245	217	116	47	31	29
31	529	---	323	232	---	366	---	195	---	47	35	---
TOTAL	3521	10549	18038	31165	11356	17572	14418	6046	6134	2290	1173	1058
MEAN	114	352	582	1005	392	567	481	195	204	73.9	37.8	35.3
MAX	529	1190	1660	4030	598	1530	941	370	438	110	46	65
MIN	23	99	264	232	226	342	245	126	116	47	31	27
CFSM	1.09	3.35	5.54	9.57	3.73	5.40	4.58	1.86	1.94	.70	.36	.34
IN.	1.25	3.74	6.39	11.04	4.02	6.23	5.11	2.14	2.17	.81	.42	.37
AC-FT	6980	20920	35780	61820	22520	34850	28600	11990	12170	4540	2330	2100

CAL YR 1979 TOTAL 133322 MEAN 365 MAX 3770 MIN 23 CFSM 3.48 IN 47.23 AC-FT 264400
WTR YR 1980 TOTAL 123320 MEAN 337 MAX 4030 MIN 23 CFSM 3.21 IN 43.69 AC-FT 244600

14172000 CALAPOOIA RIVER AT HOLLEY, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1963 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 29.5°C July 17, Aug, 7, 1972, Aug. 12, 16, 1977; minimum, 0.0°C at times during winter months.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 27.0°C July 21; minimum recorded, 1.5°C Jan. 27.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	18.5	12.5	8.5	7.0	8.5	7.0	8.5	7.5			---	---
2	18.5	12.0	10.0	8.0	9.0	8.5	8.0	7.0			---	---
3	18.5	12.0	9.5	8.0	9.5	8.5	7.5	7.5			---	---
4	18.5	12.5	10.0	9.5	9.5	8.5	8.0	7.5			---	---
5	18.0	12.5	10.0	9.0	8.5	7.0	8.0	6.5			---	---
6	16.5	13.0	9.5	8.0	7.5	7.0	6.5	5.5			9.0	---
7	15.5	14.5	9.0	7.5	7.5	7.0	5.5	5.0			9.5	7.0
8	17.5	13.5	8.0	6.5	8.0	7.0	6.5	5.5			8.5	7.5
9	17.0	11.5	8.0	7.0	8.5	7.5	6.5	6.0			9.0	6.0
10	16.5	10.5	7.0	6.0	8.5	6.0	6.0	5.0			8.5	7.0
11	16.5	10.5	7.0	6.0	6.0	5.0	7.0	4.5			8.0	6.5
12	15.5	11.0	6.0	5.0	7.0	5.5	8.0	7.0			7.5	6.0
13	16.0	12.0	6.0	5.5	7.5	6.0	8.5	7.0			7.5	6.5
14	14.5	13.0	5.5	4.5	8.5	7.0	8.5	7.0			7.0	6.0
15	16.0	13.0	5.5	4.0	8.0	6.5	7.5	6.5			7.5	5.5
16	15.0	12.5	8.5	5.5	6.5	5.5	8.5	7.5			8.5	5.5
17	15.0	11.5	9.5	8.0	9.0	6.5	8.0	6.0			8.0	6.5
18	12.5	11.0	8.5	7.0	9.0	8.5	6.0	4.5			8.0	6.5
19	11.0	10.0	8.0	6.5	9.5	8.5	5.0	4.0			8.5	6.5
20	10.0	8.5	6.5	5.5	9.0	8.0	5.5	4.0			8.5	7.0
21	10.0	8.0	6.0	5.0	8.5	7.5	5.5	4.5			8.0	6.5
22	10.5	9.5	8.5	6.0	7.5	6.0	5.5	4.5			9.0	7.0
23	12.0	10.0	7.5	7.0	7.0	6.0	5.5	4.5			9.0	7.0
24	12.0	10.5	8.5	7.5	7.5	6.5	5.5	4.5			9.0	6.0
25	12.0	11.0	7.5	6.5	7.5	6.5	6.0	5.0			9.5	6.0
26	11.5	10.0	7.0	6.0	7.0	6.0	5.5	3.5			8.5	7.0
27	12.0	10.5	6.5	5.5	6.0	5.0	3.5	1.5			9.0	6.0
28	10.5	9.5	6.5	5.5	6.0	4.5	---	---			9.0	5.5
29	10.0	8.5	7.0	6.0	7.0	6.0	---	---			8.5	7.0
30	10.0	8.5	7.5	7.0	7.0	6.5	---	---			8.5	6.0
31	9.5	8.5	---	---	8.5	7.0	---	---			7.5	6.0
MONTH	18.5	8.0	10.0	4.0	9.5	4.5	8.5	1.5			9.5	5.5

14172000 CALAPOOIA RIVER AT HOLLEY, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.5	6.0	15.5	10.0	14.0	11.5	21.0	14.5	25.0	17.0	21.5	13.5
2	9.0	5.0	13.0	11.0	12.0	10.0	19.5	16.5	21.5	17.5	20.5	16.5
3	8.5	5.5	15.5	9.0	12.0	9.0	16.5	14.5	24.5	17.0	20.0	13.5
4	9.0	7.0	17.0	11.5	13.5	8.5	14.5	13.5	24.0	16.5	21.5	13.5
5	9.5	7.5	14.5	12.5	12.5	9.5	16.0	13.0	22.0	17.5	22.0	14.0
6	8.0	6.5	14.5	11.5	12.0	10.0	20.0	12.5	23.0	15.0	21.0	15.5
7	7.5	5.0	16.0	10.5	13.5	10.0	22.5	15.5	24.5	16.0	20.0	16.5
8	9.0	7.0	13.5	11.5	14.5	12.0	21.0	17.0	24.5	17.0	21.0	13.5
9	8.5	7.5	13.0	10.5	14.5	12.5	19.0	17.0	25.0	17.5	22.5	15.0
10	9.5	6.5	11.0	9.5	15.5	12.0	21.0	15.5	25.5	17.5	23.5	16.5
11	10.5	6.0	10.5	9.5	14.5	13.0	21.0	15.5	25.0	18.5	22.5	15.5
12	12.5	7.5	12.0	10.0	13.5	11.5	21.5	17.0	23.0	17.0	18.5	16.5
13	12.5	8.0	11.0	10.5	12.0	11.5	23.0	16.0	21.5	17.0	16.5	14.5
14	10.5	8.5	12.5	10.0	11.5	10.5	23.5	18.0	23.0	17.0	18.5	13.0
15	11.5	7.5	13.0	9.5	16.5	11.0	24.0	17.0	22.5	16.0	20.0	12.5
16	12.5	7.5	15.0	8.0	15.0	12.5	23.5	17.5	23.5	17.5	21.0	13.0
17	11.0	8.5	17.0	10.5	17.0	12.0	23.5	17.5	22.0	17.0	21.0	14.0
18	12.0	8.0	17.0	12.5	18.5	13.0	23.5	17.0	21.0	17.0	17.5	16.0
19	11.5	10.0	16.5	12.5	19.0	13.5	24.0	17.0	23.0	14.5	17.5	15.5
20	10.5	9.0	18.5	12.5	17.0	15.0	25.0	18.5	22.5	15.5	17.5	15.0
21	9.0	8.0	16.0	13.5	17.5	14.0	27.0	19.0	22.0	14.0	17.5	14.5
22	10.0	8.0	13.5	10.5	16.5	14.0	26.0	20.0	22.0	15.0	18.0	12.0
23	12.0	9.0	13.5	10.0	17.5	13.5	25.0	19.5	23.0	15.0	18.5	12.5
24	11.0	9.5	12.0	10.5	16.5	13.5	24.5	17.5	20.5	16.5	18.5	13.5
25	12.5	8.0	11.0	10.0	14.5	13.0	24.5	17.5	22.0	14.0	19.0	13.0
26	14.5	10.0	10.0	9.0	15.0	11.5	25.0	18.0	21.0	14.5	19.5	14.5
27	16.0	11.0	11.5	9.0	18.5	11.5	26.0	18.5	18.5	16.5	16.5	15.0
28	14.0	11.5	14.5	9.5	18.0	14.0	26.5	19.0	21.0	14.0	19.5	14.5
29	13.0	9.5	13.5	10.5	19.5	14.5	25.5	18.0	19.5	13.0	19.5	14.0
30	14.0	8.0	14.0	11.0	20.0	13.5	25.0	17.0	16.5	14.0	20.0	15.0
31	---	---	14.5	12.0	---	---	25.5	18.0	20.0	15.5	---	---
MONTH	16.0	5.0	18.5	8.0	20.0	8.5	27.0	12.5	25.5	13.0	23.5	12.0

14173500 CALAPOOIA RIVER AT ALBANY, OR

LOCATION.--Lat 44°37'15", long 123°07'40", in NW¼ sec.13, T.11 S., R.4 W., Linn County, Hydrologic Unit 17090003, near right bank on downstream side of bridge on Riverside Drive at Albany, 0.6 mi (1.0 km) downstream from Oak Creek, and at mile 3.0 (4.8 km).

DRAINAGE AREA.--372 mi^2 (963 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1940 to current year. Prior to October 1963, published as Calapooya River at Albany.

REVISED RECORDS.--WSP 1218: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 180.85 ft (55.123 m) National Geodetic Vertical Datum of 1929. Prior to May 11, 1962, nonrecording gage at same site and datum.

REMARKS.--Water-discharge records excellent. Higher flows are affected by backwater from Willamette River at times. Diurnal fluctuation caused by ponds at flour mills near Shedd. Diversions for irrigation above station.

AVERAGE DISCHARGE.--40 years, 899 ft^3/s (25.46 m^3/s), 32.82 in/yr (834 mm/yr), 651,300 acre-ft/yr (803 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 32,700 ft^3/s (926 m^3/s) Dec. 22, 1955, gage height, 22.12 ft (6.742 m); maximum gage height, 25.5 ft (7.77 m) Jan. 2, 1943, from graph based on gage readings (backwater from Willamette River); minimum discharge, 3.5 ft^3/s (0.099 m^3/s) Sept. 7, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,150 ft^3/s (259 m^3/s) Jan. 14, gage height, 16.83 ft (5.130 m); minimum, 14 ft^3/s (0.40 m^3/s) Oct. 7, 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	737	720	1280	420	1130	602	387	227	139	44	18
2	37	473	2030	1170	627	942	549	349	234	117	32	31
3	22	363	4780	1210	1170	814	498	324	273	119	41	45
4	20	273	5630	1190	1140	1130	470	313	412	96	34	37
5	20	433	5370	3100	825	1240	525	300	473	98	28	52
6	20	638	3990	3780	1040	1320	1580	278	404	96	32	37
7	19	476	1940	2590	1520	973	2360	268	363	92	34	28
8	21	375	1370	1710	1060	804	1420	249	366	87	45	30
9	37	310	1090	1910	855	720	1470	251	298	73	32	45
10	22	268	1140	3230	730	652	1800	275	285	94	34	36
11	19	216	1040	2880	634	1350	1530	329	261	80	33	34
12	20	211	836	3460	582	1320	1200	329	232	72	29	27
13	19	198	744	5620	532	1680	1040	292	259	69	23	28
14	17	176	667	8990	495	4050	985	273	282	69	25	21
15	30	164	602	8470	473	4710	969	261	292	64	37	30
16	28	166	535	6260	424	3600	877	242	242	53	36	45
17	33	227	525	4210	421	1960	768	227	225	62	38	33
18	44	623	927	2700	740	1730	708	207	220	67	23	35
19	68	1480	989	1910	946	1570	634	202	200	58	38	27
20	451	1020	915	1520	962	1310	674	188	172	53	34	26
21	424	638	1740	1240	862	1340	1360	176	178	50	38	21
22	401	555	2070	1050	761	1160	1420	174	166	42	32	45
23	202	1760	1770	892	1210	989	889	200	151	32	30	61
24	200	2270	3150	782	1120	889	727	213	160	45	26	50
25	180	2770	2060	716	873	811	660	198	162	42	19	33
26	335	2510	1160	649	1470	751	602	268	174	40	38	44
27	352	1700	915	575	1420	772	528	335	196	39	33	36
28	343	1100	796	510	1500	712	502	424	168	37	26	28
29	343	851	720	480	1460	623	463	363	159	36	23	25
30	303	723	693	460	---	596	424	329	137	35	29	47
31	430	---	1090	440	---	578	---	270	---	39	21	---
TOTAL	4476	23707	52004	74984	26272	42226	28234	8494	7371	2095	987	1055
MEAN	144	790	1678	2419	906	1362	941	274	246	67.6	31.8	35.2
MAX	451	2770	5630	8990	1520	4710	2360	424	473	139	45	61
MIN	16	164	525	440	420	578	424	174	137	32	19	18
CFSM	.39	2.12	4.51	6.50	2.44	3.66	2.53	.74	.66	.18	.09	.10
IN.	.45	2.37	5.20	7.50	2.63	4.22	2.82	.85	.74	.21	.10	.11
AC-FT	8880	47020	103100	148700	52110	83760	56000	16850	14620	4160	1960	2090

CAL YR 1979 TOTAL 260959.7 MEAN 715 MAX 6160 MIN 9.7 CFSM 1.92 IN 26.10 AC-FT 517600
WTR YR 1980 TOTAL 271905.0 MEAN 743 MAX 8990 MIN 16 CFSM 2.00 IN 27.19 AC-FT 539300

14173500 CALAPOOIA RIVER AT ALBANY, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: January 1964 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 28.5°C Aug. 16, 17, 19-21, 1967, Aug. 9, 1978; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 27.0°C July 21, 28; minimum, 0.0°C Jan. 29-31.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	18.5	16.5	10.5	10.0	6.5	6.0	8.0	7.0	1.5	.5	9.0	8.5
2	18.5	16.0	10.0	9.5	9.0	6.5	8.0	8.0	3.5	1.5	9.5	8.5
3	18.0	16.0	10.5	9.5	9.0	9.0	8.0	7.5	5.0	3.5	10.0	9.0
4	18.0	16.0	10.5	10.0	9.5	9.0	7.5	7.0	6.0	5.0	10.5	10.0
5	18.5	16.0	11.0	10.5	9.5	8.0	7.0	6.5	5.5	5.5	10.5	10.0
6	18.0	16.0	11.0	10.0	8.0	7.5	6.5	5.5	6.5	5.5	10.0	9.0
7	16.5	16.0	10.5	10.0	7.5	7.5	5.5	4.5	7.0	6.5	9.5	9.0
8	17.5	15.5	10.0	9.0	7.5	7.5	5.5	4.5	6.5	6.0	10.0	9.0
9	17.5	15.0	9.5	8.5	8.0	7.5	6.0	5.5	6.0	5.5	10.0	9.0
10	17.0	14.5	8.5	8.0	7.5	7.0	6.0	4.0	6.5	5.5	9.0	8.5
11	16.5	14.5	8.0	7.5	7.0	6.0	4.0	3.5	6.5	5.5	9.0	8.0
12	16.0	14.5	7.5	7.0	6.0	5.5	8.0	4.0	6.0	5.0	---	---
13	15.5	14.5	7.0	6.5	6.5	5.5	8.5	8.0	5.5	4.5	---	---
14	15.5	15.0	7.0	6.5	7.0	6.5	9.0	8.5	5.0	4.5	---	---
15	16.5	15.0	6.5	5.5	8.0	7.0	8.5	7.5	5.5	5.0	---	---
16	16.0	15.0	6.5	6.0	7.5	7.0	7.5	7.0	5.5	5.0	---	---
17	15.0	13.5	7.0	6.5	7.0	7.0	8.0	7.5	5.5	5.0	---	---
18	14.0	12.5	8.0	7.0	8.5	7.0	7.5	5.5	6.5	5.5	---	---
19	12.5	12.0	7.5	7.0	9.0	8.5	5.5	4.5	8.0	6.5	---	---
20	12.0	10.5	7.0	6.5	9.0	9.0	4.5	4.0	8.5	8.0	---	---
21	10.5	9.5	6.5	5.5	9.0	8.0	4.5	4.0	8.0	7.5	---	---
22	10.5	9.5	6.0	5.5	8.0	6.5	5.0	4.5	7.5	6.5	---	---
23	12.0	10.5	7.0	6.0	6.5	5.5	5.0	4.5	7.5	7.0	---	---
24	12.0	11.5	7.0	6.5	6.0	5.5	5.0	4.0	8.5	7.0	---	---
25	13.0	12.0	7.5	7.0	7.0	6.0	5.0	4.5	9.0	8.0	---	---
26	13.0	12.5	7.0	6.0	7.0	6.5	5.0	4.5	9.5	9.0	---	---
27	13.0	12.5	6.0	5.5	6.5	6.0	4.5	2.5	10.5	9.5	---	---
28	12.5	12.0	5.5	5.0	6.0	5.5	2.5	.5	10.5	10.0	---	---
29	12.0	11.5	5.5	5.0	5.5	5.5	.5	.0	10.0	9.0	---	---
30	11.5	11.0	6.0	5.5	6.0	5.5	.0	.0	---	---	---	---
31	11.0	10.5	---	---	7.0	6.0	.5	.0	---	---	---	---
MONTH	18.5	9.5	11.0	5.0	9.5	5.5	9.0	.0	10.5	.5	10.5	8.0

14173500 CALAPOOIA RIVER AT ALBANY, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1			---	---	16.5	15.5	21.5	18.0	24.5	21.5	20.0	17.0
2			---	---	16.0	15.0	22.5	19.0	23.5	21.5	20.0	18.5
3			---	---	16.0	14.0	21.5	19.0	24.0	20.5	20.0	17.5
4			---	---	16.5	13.5	19.0	17.5	24.0	20.0	20.5	17.0
5			---	---	15.0	13.5	18.0	17.0	22.5	21.0	21.0	18.0
6			---	---	14.5	13.5	18.5	16.5	22.5	19.0	20.5	18.0
7			17.0	14.0	15.0	13.0	20.0	16.5	23.5	19.5	21.5	19.0
8			16.0	14.5	16.0	13.5	22.0	18.5	23.5	20.0	21.5	18.0
9			15.0	14.5	17.5	15.0	22.0	19.5	24.5	20.5	22.0	19.0
10			14.5	13.5	17.5	15.5	20.5	19.0	24.5	21.0	22.5	19.5
11			13.5	12.5	16.5	15.5	22.0	19.0	24.0	21.0	22.0	19.0
12			13.0	12.0	16.5	15.5	22.0	19.5	22.5	20.5	21.0	19.5
13			13.5	12.0	16.0	14.5	23.0	19.5	22.5	20.0	19.5	17.5
14			14.5	13.0	15.0	14.0	23.0	20.5	22.5	19.0	19.0	16.5
15			14.5	13.0	17.0	14.5	23.5	20.0	21.5	19.0	20.0	16.5
16			16.0	13.0	18.0	15.0	24.5	21.0	22.5	19.5	20.0	17.0
17			17.0	14.0	---	16.0	24.5	21.0	22.0	19.5	20.0	17.5
18			17.5	15.5	---	---	25.0	21.5	21.0	19.5	19.5	17.5
19			18.5	16.0	19.0	---	24.5	21.5	22.0	18.0	17.5	17.0
20			18.5	16.5	20.0	17.5	25.5	22.0	21.5	18.5	17.5	16.0
21			18.0	16.5	19.5	18.5	27.0	23.0	21.5	18.0	18.5	16.0
22			17.5	16.0	19.5	18.0	25.5	23.5	21.5	18.0	18.0	15.5
23			16.0	15.0	19.5	17.5	25.5	22.5	22.0	18.5	18.0	16.0
24			15.0	14.0	19.0	17.5	25.0	22.0	21.5	19.0	18.5	16.0
25			14.5	13.5	18.5	17.5	25.0	22.0	22.0	18.5	19.0	16.5
26			13.5	13.0	19.0	16.5	26.0	22.0	21.5	18.5	18.5	17.0
27			13.5	12.5	18.0	16.5	26.5	22.5	20.5	19.0	17.5	17.0
28			15.0	11.5	19.0	16.5	27.0	23.0	21.0	17.5	18.5	16.5
29			16.0	12.5	20.0	17.0	25.5	22.0	20.5	17.5	19.0	16.0
30			17.5	14.0	21.0	18.0	25.0	21.5	19.5	17.5	19.5	17.5
31			17.0	15.0	---	---	25.5	22.0	19.0	17.0	---	---
MONTH			18.5	11.5	21.0	13.0	27.0	16.5	24.5	17.0	22.5	15.5

14174000 WILLAMETTE RIVER AT ALBANY, OR

LOCATION.--Lat 44°38'20", long 123°06'20", in SW¼ sec.6, T.11 S., R.3 W., Linn County, Hydrologic Unit 17090003, on right bank 5 ft (1.5 m) upstream from bridge on U.S. Highway 20 (Ellsworth Street) in Albany, 0.2 mi (0.3 km) downstream from Calapooia River, and at mile 119.31 (191.97 km).

DRAINAGE AREA.--4,840 mi² (12,500 km²), approximately.

PERIOD OF RECORD.--November 1878 to April 1888 (fragmentary), January to June 1892, November 1892 to September 1894, December 1894 to current year. Monthly discharge only for some periods, published in WSP 1318.

REVISED RECORDS.--WSP 694: Drainage area. WSP 904: 1939. WSP 964: 1881, 1890, 1894, 1897, 1901, 1903, 1908, 1910, 1916, 1923, 1927, 1932(M). WSP 984: 1916. WSP 1248: 1895, 1902, 1907, 1915(M), 1917(M), 1918-19, 1934(M). WSP 1318 (monthly and annual figures only): 1894, 1897, 1901-3, 1907-8, 1910, 1916, 1918-19, 1923, 1927.

GAGE.--Water-stage recorder. Datum of gage is 167.18 ft (50.956 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 27, 1906, nonrecording gage at site 0.2 mi (0.3 km) upstream at datum 5.00 ft (1.524 m) higher. Sept. 27, 1906, to Nov. 12, 1934, nonrecording gage at site 300 ft (91 m) upstream at datum 5.00 ft (1.524 m) higher. Nov. 14, 1934, to Sept. 30, 1962, at datum 5.00 ft (1.524 m) higher.

REMARKS.--Records excellent. Flow regulated by nine reservoirs above station (see elsewhere in this report). Albany power canal diverts water from South Santiam River at Lebanon and discharges into Calapooia River near mouth; small diversions for irrigation and municipal water supply.

AVERAGE DISCHARGE.--86 years (water years 1894, 1896-80), 14,450 ft³/s (409.2 m³/s), 40.54 in/yr (1,030 mm/yr), 10,470,000 acre-ft/yr (12.9 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 266,000 ft³/s (7,530 m³/s) Jan. 14, 1881, gage height, 37.8 ft (11.52 m), present datum; minimum, 1,840 ft³/s (52.1 m³/s) Sept. 1, 2, 1940.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 4, 1861, reached a stage of 41.0 ft (12.50 m), discharge, 340,000 ft³/s (9,630 m³/s), from rating curve extended above 220,000 ft³/s (6,230 m³/s). Flood of Feb. 4, 1890, reached a stage of 38.9 ft (11.86 m), discharge, 291,000 ft³/s (8,240 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 71,000 ft³/s (2,010 m³/s) Jan. 14, gage height, 21.83 ft (6.654 m); minimum, 4,010 ft³/s (114 m³/s) July 21, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6860	15000	16300	13600	14500	13300	8620	8280	6670	5540	4450	4820
2	6750	14000	18000	14500	14100	12700	8280	7810	6630	5200	4580	5190
3	6420	13100	32700	14500	13500	11800	7890	7220	7080	5030	4860	5430
4	6380	12600	41300	15000	13500	11500	7660	6980	7950	5150	4870	6730
5	6460	12900	43600	20500	12400	11500	7720	6810	8450	5150	4860	7060
6	6460	14500	42800	31700	11700	11600	10500	6630	8300	5080	4840	7120
7	6480	14000	37900	28500	12900	10900	14300	6460	8240	4920	4840	7120
8	6500	12200	30500	24200	12200	10100	13400	6350	8220	4700	4770	7080
9	6480	11600	24500	25900	11200	9440	13800	6380	7850	4450	4700	7140
10	6650	11200	19800	31600	10300	9060	17100	6500	7460	4370	4700	7040
11	7080	10800	18700	37400	9560	10500	18900	6690	7120	4300	4770	7120
12	7440	10500	16800	38400	9010	12300	17700	6690	6670	4240	4770	7460
13	7560	9310	15600	52000	8580	14000	16200	6560	6540	4250	4740	7460
14	7640	8930	14900	68000	8300	23000	15700	6440	6840	4200	4790	7460
15	7780	8410	14100	68100	8050	33700	15100	6330	7020	4170	4790	7480
16	7830	7760	13500	57800	7720	31600	13700	6220	6820	4250	4790	7260
17	7740	7660	13200	49200	7660	24600	12500	6140	6540	4320	4790	6960
18	8030	8900	14000	47000	8470	20500	11700	6100	6400	4270	4840	7080
19	9080	13400	14300	49000	9790	18600	11000	5760	6200	4150	4890	7320
20	13600	13900	13600	47600	10700	17000	10800	5580	5790	4110	4890	7280
21	15400	12500	14900	47000	10300	16700	12800	5490	5580	4060	4800	7480
22	14400	12100	18700	45900	9700	16100	16300	5490	5470	4190	4740	7480
23	12800	15700	20000	42600	11100	15100	15300	5740	5340	4320	4790	7520
24	11800	21800	22800	34200	11800	13900	13600	6010	5380	4520	4800	7380
25	12200	28800	20300	27600	10900	12500	12200	6010	5450	4520	4800	7320
26	13800	30200	16900	23700	12400	11200	11000	6400	5790	4500	4750	7320
27	13900	26500	14500	18700	13400	10800	10100	6960	6330	4470	4750	7280
28	13400	22400	13000	18500	13400	10200	9510	7930	6270	4480	4790	7280
29	13300	19300	12200	19500	13900	9510	9260	8180	5990	4400	4790	7280
30	12900	17300	11500	18400	---	9060	8770	7680	5700	4350	4770	7240
31	13100	---	11900	17400	---	8800	---	7100	---	4380	4820	---
TOTAL	296220	437270	632800	1048000	321040	451570	371410	204920	200090	140040	148130	211190
MEAN	9555	14580	20410	33810	11070	14570	12380	6610	6670	4517	4778	7040
MAX	15400	30200	43600	68100	14500	33700	18900	8280	8450	5540	4890	7520
MIN	6380	7660	11500	13600	7660	8800	7660	5490	5340	4060	4450	4820
CFSM	1.97	3.01	4.22	6.99	2.29	3.01	2.56	1.37	1.38	.93	.99	1.46
IN.	2.28	3.36	4.86	8.05	2.47	3.47	2.85	1.58	1.54	1.08	1.14	1.62
AC-FT	587600	867300	1255000	2079000	636800	895700	736700	406500	396900	277800	293800	418900

CAL YR 1979 TOTAL 4636000 MEAN 12700 MAX 45400 MIN 4520 CFSM 2.62 IN 35.63 AC-FT 9196000
WTR YR 1980 TOTAL 4462680 MEAN 12190 MAX 68100 MIN 4060 CFSM 2.52 IN 34.30 AC-FT 8852000

14178000 NORTH SANTIAM RIVER BELOW BOULDER CREEK, NEAR DETROIT, OR

LOCATION.--Lat 44°42'25", long 122°06'00", in SE¼NW¼ sec.17, T.10 S., R.6 E., Marion County, Hydrologic Unit 17090005, on right bank 0.5 mi (0.8 km) downstream from Boulder Creek, 3.0 mi (4.8 km) southeast of Detroit, and at mile 70.7 (113.8 km).

DRAINAGE AREA.--216 mi^2 (559 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1907 to October 1909, October 1928 to current year. Monthly discharge only January 1907, published in WSP 1318. Prior to October 1952, published as "at Detroit."

REVISED RECORDS.--WSP 814: Drainage area at former site. WSP 1248: 1931.

GAGE.--Water-stage recorder. Datum of gage is 1,590.07 ft (484.653 m) National Geodetic Vertical Datum of 1929. See WSP 1738 for history of changes prior to Oct. 1, 1952.

REMARKS.--Water-discharge records good. No regulation or diversion above station.

AVERAGE DISCHARGE.--54 years, 1,004 ft^3/s (28.43 m^3/s), 63.12 in/yr (1,603 mm/yr), 727,400 acre-ft/yr (897 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,700 ft^3/s (756 m^3/s) Dec. 22, 1964, gage height, 13.76 ft (4.194 m), temporary backwater from debris, from rating curve extended above 6,600 ft^3/s (187 m^3/s) on basis of slope-area measurement of peak flow; minimum, 250 ft^3/s (7.08 m^3/s) Sept. 13, 1909.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,700 ft^3/s (105 m^3/s) and maximum discharge, 7,340 ft^3/s (208 m^3/s) Jan.14, gage height, 8.11 ft (2.472 m); minimum, 315 ft^3/s (8.92 m^3/s) Sept. 17, 27, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	335	559	614	844	906	1320	686	1120	673	542	396	344
2	335	519	1780	837	1080	1210	673	1090	714	536	383	392
3	335	486	2290	906	1360	1140	667	1040	700	536	378	365
4	331	559	2690	906	1300	1260	667	1040	680	524	374	339
5	335	640	2250	2020	1200	1260	749	1140	660	508	374	339
6	335	583	1620	1730	1400	1200	837	1040	673	497	369	339
7	335	524	1320	1380	1360	1120	800	955	714	491	365	339
8	331	491	1120	1240	1250	1050	860	906	693	519	365	335
9	331	475	1010	1190	1140	988	1190	898	680	508	365	331
10	327	445	1150	1040	1050	938	1240	930	667	491	365	335
11	327	430	947	971	980	930	1170	898	647	481	365	335
12	323	425	875	3250	922	906	1180	837	653	465	365	335
13	323	420	807	5740	875	971	1340	807	742	460	361	344
14	339	406	763	6480	837	1040	1630	785	714	455	356	335
15	356	396	742	4430	800	963	1790	763	686	455	356	319
16	339	430	707	3090	770	890	1680	727	673	450	352	323
17	331	513	693	2540	770	890	1710	693	660	445	352	315
18	406	553	700	2020	837	898	1660	686	647	440	365	348
19	742	497	742	1680	1030	875	1680	693	634	435	352	339
20	640	475	829	1500	1090	883	1800	693	627	435	352	378
21	547	455	906	1330	1010	852	1830	707	621	440	348	365
22	486	542	875	1220	955	822	1580	763	602	445	344	339
23	524	686	822	1120	947	815	1470	714	589	435	339	331
24	497	1160	793	1060	922	778	1430	686	583	411	344	327
25	647	1190	742	1010	955	763	1370	700	700	406	344	319
26	621	930	700	947	1370	770	1340	735	653	401	339	319
27	614	785	667	860	1410	770	1390	763	602	401	339	319
28	571	700	634	807	1520	735	1460	707	577	406	339	319
29	536	647	614	770	1470	735	1350	680	565	411	335	319
30	536	621	595	730	---	727	1200	653	553	396	331	319
31	653	---	595	763	---	714	---	634	---	392	348	---
TOTAL	13688	17542	31592	54411	31516	29213	38429	25483	19582	14217	11060	10105
MEAN	442	585	1019	1755	1087	942	1281	822	653	459	357	337
MAX	742	1190	2690	6480	1520	1320	1830	1140	742	542	396	392
MIN	323	396	595	730	770	714	667	634	553	392	331	315
CFSM	2.05	2.71	4.72	8.13	5.03	4.36	5.93	3.81	3.02	2.13	1.65	1.56
IN.	2.36	3.02	5.44	9.37	5.43	5.03	6.62	4.39	3.37	2.45	1.90	1.74
AC-FT	27150	34790	62660	107900	62510	57940	76220	50550	38840	28200	21940	20040

CAL YR 1979 TOTAL 303646 MEAN 832 MAX 3320 MIN 323 CFSM 3.85 IN 52.29 AC-FT 602300
WTR YR 1980 TOTAL 296838 MEAN 811 MAX 6480 MIN 315 CFSM 3.76 IN 51.12 AC-FT 588800

14178000 NORTH SANTIAM RIVER BELOW BOULDER CREEK, NEAR DETROIT, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1951 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: April 1951 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 19.0°C July 8, 18, 19, 1970; minimum, 0.0°C at times during 1954, 1956, 1974, 1978-80.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 18.0°C July 21, 22; minimum, 0.0°C Jan. 27-30.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	10.5	8.0	6.5	5.0	4.5	3.5	5.0	4.5	3.0	2.5	---	---
2	11.0	8.0	7.0	5.5	5.0	4.5	4.5	3.5	4.0	3.0	---	---
3	11.0	7.5	7.5	6.0	5.5	5.0	5.0	4.0	4.5	3.5	---	---
4	11.0	8.5	7.5	7.0	5.5	4.5	5.0	4.5	4.5	3.5	---	---
5	11.0	9.0	7.5	6.5	5.0	4.0	5.0	4.0	5.0	3.5	---	---
6	11.0	9.5	7.5	6.0	4.5	3.5	4.0	2.5	4.5	3.5	---	---
7	12.0	10.0	6.5	5.5	5.0	4.0	3.5	2.5	5.0	3.5	---	---
8	12.0	9.5	6.0	4.5	4.5	4.0	3.0	2.0	4.5	3.5	---	---
9	10.5	8.0	5.5	3.5	5.0	3.5	3.5	2.0	4.5	2.5	---	---
10	10.0	7.5	5.0	3.5	4.5	3.0	2.0	1.5	4.5	3.0	---	---
11	10.5	8.0	4.5	3.5	3.0	2.0	3.0	2.0	---	2.5	4.5	---
12	10.0	8.0	4.5	3.5	4.0	3.0	4.0	3.0	---	---	5.0	3.0
13	10.5	8.0	4.5	3.5	4.5	3.0	4.5	3.5	---	---	4.5	3.5
14	10.5	9.5	4.5	3.0	4.5	3.5	4.5	4.0	---	---	3.5	2.5
15	10.5	9.0	5.0	3.0	5.0	3.5	4.5	4.0	---	---	3.5	2.0
16	10.0	8.5	6.5	4.5	4.5	3.0	5.0	4.5	---	---	5.0	2.5
17	10.0	8.0	6.5	6.0	5.5	3.0	4.5	3.5	---	---	5.0	3.5
18	9.0	8.0	6.0	3.5	5.5	5.0	3.5	2.5	---	---	5.5	3.5
19	8.0	7.0	5.0	4.0	5.5	5.0	3.0	2.0	---	---	6.0	4.0
20	7.5	6.5	4.5	3.0	5.0	5.0	3.5	2.0	---	---	5.5	4.0
21	8.0	6.5	3.5	2.5	5.0	4.0	4.0	3.0	---	---	5.0	3.5
22	8.0	7.0	5.0	3.0	4.0	3.0	4.0	3.0	---	---	6.5	4.0
23	9.0	7.5	5.0	3.5	3.5	2.5	4.0	3.0	---	---	5.5	4.0
24	9.5	8.0	5.0	4.0	4.0	3.5	4.0	3.0	---	---	6.5	4.0
25	9.0	8.5	4.5	3.5	4.5	3.5	4.5	3.0	---	---	6.5	3.5
26	9.0	8.0	4.5	3.0	4.0	3.0	3.5	1.0	---	---	4.5	4.0
27	9.0	8.0	3.0	2.5	3.0	2.5	1.0	.0	---	---	6.0	3.5
28	8.0	7.0	3.5	2.0	3.5	2.5	.0	.0	---	---	6.0	3.0
29	8.0	7.0	3.5	2.5	4.0	3.5	.0	.0	---	---	5.0	4.0
30	7.5	6.5	4.5	3.0	4.5	3.5	1.0	.0	---	---	6.0	3.5
31	7.5	6.5	---	---	5.0	4.0	2.5	1.0	---	---	5.5	3.5
MONTH	12.0	6.5	7.5	2.0	5.5	2.0	5.0	.0	5.0	2.5	6.5	2.0

14178000 NORTH SANTIAM RIVER BELOW BOULDER CREEK, NEAR DETROIT, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.0	4.0			---	---	15.0	10.0	16.5	11.5	12.5	9.5
2	6.0	3.0			---	---	15.5	10.5	16.5	11.0	12.5	10.5
3	6.0	3.0			---	---	12.0	10.5	16.0	11.5	12.0	8.0
4	6.5	4.0			---	---	11.0	9.5	15.5	10.5	12.5	9.0
5	6.0	4.5			---	---	13.5	9.5	15.5	11.0	13.0	9.0
6	5.0	2.5			---	---	15.5	9.5	14.5	9.5	13.0	10.0
7	5.0	2.5			---	---	16.0	10.0	15.5	10.0	14.0	10.5
8	5.0	4.0			---	---	15.0	11.0	16.0	11.5	12.5	8.5
9	5.5	4.5			---	---	14.0	11.0	15.5	11.0	13.0	10.5
10	6.0	4.0			---	---	15.0	10.5	15.5	11.5	14.0	10.5
11	7.5	3.5			---	---	14.0	9.5	16.5	12.0	13.5	10.0
12	8.5	4.5			---	---	15.5	10.5	16.0	11.0	11.5	10.5
13	8.0	4.5			---	---	15.0	10.0	16.0	11.0	10.5	9.0
14	6.0	5.0			---	---	15.5	11.5	15.5	11.0	11.0	8.5
15	7.5	4.5			---	---	15.5	10.0	13.5	10.0	11.5	8.0
16	8.5	4.0			---	---	15.5	10.5	15.5	11.0	11.5	8.5
17	7.0	4.5			---	---	15.5	11.0	14.0	10.5	12.0	8.5
18	8.0	4.5			---	---	15.5	11.0	13.0	11.0	11.0	10.0
19	6.5	5.5			---	---	16.0	10.5	14.0	9.0	10.0	9.5
20	6.0	5.0			---	---	17.0	11.5	14.0	9.5	10.5	9.5
21	5.5	4.5			---	---	18.0	12.0	13.5	9.0	10.5	8.5
22	7.0	5.0			---	---	18.0	13.0	14.0	9.0	10.0	7.0
23	7.0	5.5			---	---	17.5	13.0	14.0	9.5	10.5	8.0
24	7.0	5.5			10.5	---	16.0	11.5	14.0	10.0	10.5	8.0
25	9.0	5.0			10.5	9.0	16.5	11.5	14.0	9.5	11.0	9.0
26	10.0	6.0			11.0	8.5	16.5	11.5	13.5	10.0	11.5	9.0
27	10.0	6.0			14.5	9.0	17.0	11.5	12.0	10.5	11.0	8.5
28	7.5	6.5			14.5	9.0	17.5	12.5	12.5	9.5	11.5	9.5
29	---	5.5			14.5	9.5	17.0	12.0	11.5	8.5	10.5	8.5
30	---	---			14.5	8.5	16.5	11.0	11.0	8.5	12.0	9.5
31	---	---			---	---	16.5	12.5	13.0	10.0	---	---
MONTH	10.0	2.5			14.5	8.5	18.0	9.5	16.5	8.5	14.0	7.0

14178700 EAST HUMBUG CREEK NEAR DETROIT, OR

LOCATION.--Lat 44°47'57", long 122°03'28", in NW¼NE¼ sec.15, T.9 S., R.6 E., Marion County, Hydrologic Unit 17090005, in Willamette National Forest, on left bank 1.6 mi (2.6 km) upstream from confluence with Humbug Creek, and 6.3 mi (10.1 km) northeast of Detroit.

DRAINAGE AREA.--7.32 mi^2 (19.0 km^2).

PERIOD OF RECORD.--August 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,050 ft (625 m), from topographic map.

REMARKS.--Records good. No regulation or diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 954 ft^3/s (27.0 m^3/s) Jan. 12, 1981, gage height, 4.19 ft (1.277 m); minimum, 2.3 ft^3/s (0.065 m^3/s) Sept. 29, 30, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 280 ft^3/s (7.93 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 2	1000	318	9.01	3.48	1.061	Jan. 12	1700	*954	27.0	*4.19	1.277
Dec. 4	1100	430	12.2	3.66	1.116						

Minimum, 2.3 ft^3/s (0.065 m^3/s) Sept. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	19	21	59	45	54	27	27	13	8.5	3.7	2.8
2	2.8	16	189	48	74	44	25	25	14	8.2	3.7	4.7
3	2.8	15	128	51	111	41	25	24	14	8.2	3.7	3.2
4	2.7	23	274	48	71	42	31	23	15	8.5	3.5	2.9
5	2.7	37	120	167	56	46	47	22	18	7.9	3.5	2.8
6	2.7	28	73	87	84	46	49	21	16	7.6	3.5	2.7
7	2.8	21	48	55	78	41	39	20	16	7.6	3.3	2.7
8	2.8	17	37	44	59	37	55	19	16	7.6	3.3	2.7
9	2.7	15	36	43	48	34	122	19	15	7.0	3.3	2.7
10	2.7	13	45	35	41	32	95	19	14	6.7	3.2	2.6
11	2.7	13	35	35	36	31	75	18	13	6.4	3.2	2.6
12	2.7	12	31	524	32	31	80	17	13	6.1	3.3	2.8
13	2.7	11	28	486	30	36	102	16	19	5.9	3.2	2.8
14	3.3	10	29	472	27	36	102	16	19	5.9	3.2	3.0
15	3.6	10	43	232	25	31	91	15	18	5.9	3.2	2.7
16	3.1	13	38	136	24	28	78	15	16	5.6	3.2	2.6
17	3.1	18	34	122	24	29	75	14	15	5.4	3.2	2.6
18	12	23	31	84	32	31	65	14	13	5.1	3.5	3.5
19	32	19	32	63	58	33	62	13	13	5.1	3.3	3.5
20	31	18	39	51	60	36	62	13	12	4.9	3.2	7.6
21	23	16	58	43	47	35	60	13	11	4.7	3.0	4.9
22	19	27	52	39	40	31	49	13	11	4.4	3.0	3.3
23	30	42	40	35	37	31	44	13	10	4.4	3.0	2.9
24	21	110	38	37	39	30	41	13	10	4.2	2.8	2.7
25	37	73	36	35	47	29	37	14	12	4.2	2.8	2.6
26	47	39	32	30	97	31	36	17	10	4.0	2.7	2.6
27	35	28	29	30	82	31	37	20	9.6	3.9	3.0	2.4
28	26	23	27	29	73	30	36	16	9.2	3.9	3.0	2.4
29	21	21	24	29	67	31	32	15	8.9	3.9	2.9	2.4
30	21	19	23	28	---	32	29	14	8.5	3.9	2.8	2.4
31	26	---	23	27	---	30	---	13	---	3.9	3.0	---
TOTAL	429.9	749	1693	3204	1544	1080	1708	531	402.2	179.5	99.2	92.1
MEAN	13.9	25.0	54.6	103	53.2	34.8	56.9	17.1	13.4	5.79	3.20	3.07
MAX	47	110	274	524	111	54	122	27	19	8.5	3.7	7.6
MIN	2.7	10	21	27	24	28	25	13	8.5	3.9	2.7	2.4
CFSM	1.90	3.42	7.46	14.1	7.27	4.75	7.77	2.34	1.83	.79	.44	.42
IN.	2.18	3.81	8.60	16.28	7.85	5.49	8.68	2.70	2.04	.91	.50	.47
AC-FT	853	1490	3360	6360	3060	2140	3390	1050	798	356	197	183

CAL YR 1979	TOTAL 11992.1	MEAN 32.9	MAX 384	MIN 2.6	CFSM 4.50	IN 60.94	AC-FT 23790	
WTR YR 1980	TOTAL 11711.9	MEAN 32.0	MAX 524	MIN 2.4	CFSM 4.37	IN 59.51	AC-FT 23230	

14179000 BREITENBUSH RIVER ABOVE CANYON CREEK, NEAR DETROIT, OR

LOCATION.--Lat 44°45'10", long 122°07'40", in SE¼NE¼ sec.36, T.9 S., R.5 E., Marion County, Hydrologic Unit 17090005, in Willamette National Forest, on left bank 600 ft (183 m) upstream from Canyon Creek, 1.5 mi (2.4 km) northeast of Detroit, and at mile 2.0 (3.2 km).

DRAINAGE AREA.--106 mi² (275 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1932 to current year. Monthly discharge only June 1932, published in WSP 1318. Prior to October 1952, published as "above French Creek, near Detroit."

REVISED RECORDS.--WSP 1044: 1943(M). WSP 1248: 1947.

GAGE.--Water-stage recorder. Datum of gage is 1,573.95 ft (479.740 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1952, at site 0.2 mi (0.3 km) downstream at datum 13.46 ft (4.103 m) lower.

REMARKS.--Water-discharge records fair. No regulation or diversion above station.

AVERAGE DISCHARGE.--48 years, 575 ft³/s (16.28 m³/s), 73.66 in/yr (1,871 mm/yr), 416,600 acre-ft/yr (514 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,900 ft³/s (479 m³/s) Dec. 22, 1964, gage height, 14.55 ft (4.435 m); minimum, 87 ft³/s (2.46 m³/s) Sept. 2, 1940.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 4,000 ft³/s (113 m³/s) and maximum discharge, 6,210 ft³/s (176 m³/s) Jan. 14, gage height, 8.96 ft (2.731 m); minimum, 94 ft³/s (2.66 m³/s) Oct. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	325	347	614	480	827	398	532	339	265	135	125
2	107	275	1490	620	723	711	373	553	351	272	132	152
3	105	249	1630	668	1010	650	362	527	321	275	132	135
4	102	311	2050	644	868	680	365	553	300	252	130	128
5	102	480	1570	1500	768	686	455	668	304	236	128	123
6	102	407	1060	1250	984	668	548	553	293	227	125	121
7	100	329	814	918	999	609	501	460	311	239	125	118
8	100	275	668	788	848	570	581	438	325	262	125	116
9	100	246	614	814	736	521	1050	416	336	255	123	116
10	100	223	730	717	650	480	1010	403	354	233	121	114
11	98	205	581	626	575	501	841	381	332	227	118	114
12	98	191	537	2730	527	490	807	373	329	214	121	116
13	96	180	495	4570	485	592	940	377	381	211	118	118
14	96	.71	480	5230	446	656	1120	358	354	211	118	118
15	96	166	521	3410	416	581	1090	347	336	202	118	116
16	102	191	501	2040	390	506	969	321	362	202	118	114
17	114	272	470	1710	381	506	977	314	358	196	118	109
18	105	377	465	1330	438	548	918	332	351	185	132	121
19	102	339	475	1060	632	543	955	358	347	182	137	125
20	147	293	521	889	705	548	1010	369	351	180	135	163
21	450	262	686	768	626	521	962	381	339	180	132	160
22	280	311	711	686	564	490	801	411	321	177	132	137
23	320	592	620	626	575	480	736	339	300	168	130	135
24	289	940	603	609	564	451	717	304	289	158	128	132
25	470	955	570	586	586	433	668	300	358	150	125	128
26	495	668	521	543	940	446	668	325	314	150	125	125
27	455	521	485	485	1030	451	749	354	272	145	125	123
28	386	433	446	425	1050	433	814	314	279	142	128	121
29	332	377	416	400	969	442	705	300	282	140	125	121
30	314	351	390	380	---	438	575	289	279	137	125	118
31	394	---	377	360	---	420	---	289	---	135	130	---
TOTAL	6264	10915	21844	37996	19965	16878	22665	12239	9768	6208	3914	3762
MEAN	202	364	705	1226	688	544	756	395	326	200	126	125
MAX	495	955	2050	5230	1050	827	1120	668	381	275	137	163
MIN	96	166	347	360	381	420	362	289	272	135	118	109
CFSM	1.91	3.43	6.65	11.6	6.49	5.13	7.13	3.73	3.08	1.89	1.19	1.18
IN.	2.20	3.83	7.67	13.33	7.01	5.92	7.95	4.30	3.43	2.18	1.37	1.32
AC-FT	12420	21650	43330	75370	39600	33480	44960	24280	19370	12310	7760	7460

CAL YR 1979 TOTAL 167013 MEAN 458 MAX 2720 MIN 96 CFSM 4.32 IN 58.61 AC-FT 331300
WTR YR 1980 TOTAL 172418 MEAN 471 MAX 5230 MIN 96 CFSM 4.44 IN 60.51 AC-FT 342000

14179000 BREITENBUSH RIVER ABOVE CANYON CREEK, NEAR DETROIT, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1951 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: December 1950 to July 1961, January 1962 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 18.0°C July 27, 1973; minimum, 0.0°C on several days in 1972, 1973, 1977-79.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 17.0°C July 21-23, 28; minimum recorded, 1.5°C Jan. 10.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	10.5	8.5	6.5	5.5	4.5	4.0	5.5	4.5				
2	10.5	8.0	7.0	6.0	5.5	4.5	5.0	4.5				
3	10.0	8.0	7.5	6.5	6.0	5.5	5.0	4.5				
4	10.5	8.5	7.5	7.0	6.0	5.5	5.5	5.0				
5	11.0	9.0	8.0	7.0	5.5	5.0	5.5	3.5				
6	10.5	9.5	7.5	6.5	5.5	5.0	4.0	3.0				
7	11.5	10.5	7.0	6.0	5.5	5.0	4.0	2.0				
8	11.5	10.0	6.5	5.0	5.5	5.0	3.5	2.0				
9	11.0	9.5	5.5	4.5	6.0	5.0	3.5	2.0				
10	10.0	8.0	5.0	4.5	5.5	4.0	3.0	1.5				
11	10.0	8.0	5.0	4.0	4.0	3.0	4.0	2.5				
12	9.5	8.5	5.0	4.0	4.5	3.5	---	---				
13	10.5	8.5	4.5	4.0	5.0	4.0	---	---				
14	10.5	10.0	4.5	3.5	5.0	4.5	---	---				
15	11.0	9.5	5.0	3.5	5.5	4.5	---	---				
16	10.0	9.0	6.0	5.0	4.5	4.0	---	---				
17	10.0	8.5	6.5	6.0	6.0	4.5	---	---				
18	8.5	8.0	6.0	4.0	6.0	6.0	---	---				
19	8.0	7.0	5.5	4.5	6.0	6.0	---	---				
20	7.0	6.5	4.5	4.0	6.0	5.5	---	---				
21	7.5	6.5	4.0	3.5	5.5	4.5	---	---				
22	8.0	7.0	5.0	4.0	4.5	3.5	---	---				
23	8.5	8.0	5.5	5.0	4.0	3.0	---	---				
24	9.0	8.0	5.5	4.5	4.5	4.0	---	---				
25	9.0	8.0	5.0	4.5	5.0	4.5	---	---				
26	8.5	8.0	5.0	4.5	4.5	4.0	---	---				
27	8.5	8.0	4.5	3.5	4.0	3.5	---	---				
28	8.0	7.5	4.0	3.0	4.0	3.0	---	---				
29	7.5	7.0	4.0	3.0	4.5	4.0	---	---				
30	7.5	6.5	4.5	4.0	4.5	4.0	---	---				
31	7.5	6.5	---	---	5.0	4.0	---	---				
MONTH	11.5	6.5	8.0	3.0	6.0	3.0	5.5	1.5				

14179000 BREITENBUSH RIVER ABOVE CANYON CREEK, NEAR DETROIT, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1			---	---	10.0	7.5	14.0	9.0	16.0	12.0	13.0	9.5
2			---	---	7.5	6.0	14.5	9.5	15.5	12.0	13.5	11.5
3			---	---	9.0	6.0	11.5	9.5	15.5	12.0	12.0	9.0
4			---	---	10.0	6.5	10.5	9.0	15.0	11.0	12.5	9.5
5			---	---	9.0	7.0	12.0	8.5	15.0	11.5	13.0	10.0
6			---	---	8.5	7.0	14.5	9.5	14.5	10.5	13.5	10.5
7			---	---	9.5	7.0	15.0	9.5	15.0	11.0	14.5	12.0
8			---	---	11.5	7.5	14.0	10.5	15.5	12.0	12.5	9.5
9			---	---	11.5	8.5	13.0	10.5	15.0	11.5	13.5	10.5
10			---	---	12.0	7.5	14.0	10.0	14.5	12.0	14.0	11.0
11			---	---	10.5	8.0	13.0	9.5	16.0	12.5	13.5	11.0
12			---	---	9.0	7.5	14.5	10.0	15.5	12.0	12.5	11.5
13			---	---	8.0	7.5	14.5	9.5	15.5	11.5	11.5	10.0
14			8.5	---	8.0	7.0	13.0	11.0	15.0	12.0	11.5	9.5
15			8.0	6.0	12.0	7.5	15.0	9.5	13.5	11.0	11.5	8.5
16			10.0	5.5	10.5	8.5	14.5	10.5	15.0	12.0	12.0	9.0
17			11.0	6.0	12.5	7.5	15.0	10.5	13.5	11.0	12.0	9.0
18			10.5	6.5	13.0	8.5	15.0	10.5	13.0	11.5	11.5	10.5
19			11.0	7.0	13.0	8.0	15.5	10.5	14.0	10.0	10.5	10.0
20			11.5	7.0	13.5	9.0	16.0	11.0	14.0	10.5	10.5	9.5
21			9.0	7.5	13.0	9.5	17.0	12.0	13.5	10.0	10.0	9.0
22			7.5	6.5	11.0	9.0	17.0	13.0	14.0	10.0	9.5	7.5
23			8.0	5.5	11.0	8.5	17.0	12.5	14.0	10.5	10.5	8.5
24			7.0	5.5	10.5	8.5	15.5	11.5	14.5	11.0	10.0	8.0
25			7.5	6.0	10.0	8.5	16.0	11.5	14.0	10.5	11.0	8.5
26			6.5	5.5	10.5	8.0	16.0	11.5	13.5	10.5	11.0	9.5
27			7.5	6.0	13.5	8.0	16.5	12.0	13.0	11.5	10.5	9.0
28			10.5	6.5	14.0	8.5	17.0	12.5	13.0	10.0	11.5	10.0
29			8.5	7.0	13.5	9.0	16.0	12.5	12.0	9.5	11.0	9.0
30			11.0	6.5	13.5	8.0	16.0	11.5	11.0	9.5	12.0	10.0
31			12.0	7.5	---	---	16.5	12.5	13.0	10.5	---	---
MONTH			12.0	5.5	14.0	6.0	17.0	8.5	16.0	9.5	14.5	7.5

14180500 DETROIT LAKE NEAR DETROIT, OR

LOCATION.--Lat 44°43'20", long 122°14'55", in SW¼NW¼ sec.7, T.10 S., R.5 E., Marion County, Hydrologic Unit 17090005, in control house near right abutment of Detroit Dam on North Santiam River, 4.9 mi (7.9 km) west of Detroit, and at mile 60.9 (98.0 km).

DRAINAGE AREA.--437 mi² (1,132 km²).

PERIOD OF RECORD.--January 1953 to current year. Prior to October 1971, published as Detroit Reservoir near Detroit.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by concrete, gravity-type dam with six 42-ft (12.8 m) by 28-ft (8.5 m) control gates. Length of dam is 1,580 ft (481.6 m), built by Corps of Engineers. Storage began in January 1953. Total capacity is 455,100 acre-ft (561 hm³) and usable capacity is 340,100 acre-ft (419 hm³) between elevations 1,425.0 ft (434.34 m), proposed lower limit of operation, and 1,569.0 ft (478.23 m), top of spillway gates. Reservoir used for flood control, power development, irrigation, improvement of navigation, pollution abatement, and other purposes. Figures given herein represent total contents.

COOPERATION.--Midnight elevations furnished by Corps of Engineers and reviewed by Geological Survey. Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 457,900 acre-ft (565 hm³) July 13, 1972, elevation, 1,569.79 ft (478.472 m); minimum, 115,500 acre-ft (142 hm³) Jan. 30, 1969, elevation, 1,425.37 ft (434.453 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 438,100 acre-ft (540 hm³) May 28, elevation, 1,564.10 ft (476.738 m); minimum contents, 152,400 acre-ft (188 hm³) Dec. 19 or 20, elevation, 1,448.85 ft (441.609 m).

Capacity table (elevation, in feet, and total contents, in acre-feet)

1,425	115,000	1,480	210,900	1,530	331,500
1,430	122,200	1,490	232,000	1,540	360,200
1,440	137,700	1,500	254,600	1,550	390,900
1,450	154,400	1,510	278,700	1,560	424,000
1,460	172,200	1,520	304,400	1,570	458,600
1,470	191,100				

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1522.74	1485.49	1456.57	1453.98	1459.55	1502.98	1531.53	1559.02	1563.24	1563.37	1559.65	1547.21
2	1521.29	1483.90	1460.66	1454.96	1461.30	1504.41	1531.93	1559.67	1563.28	1563.22	1559.40	1546.55
3	1519.82	1482.26	1463.39	1455.96	1463.91	1505.73	1532.29	1560.25	1563.44	1563.28	1559.19	1545.80
4	1518.36	1481.06	1467.14	1456.58	1465.99	1507.31	1532.70	1560.84	1563.51	1563.28	1558.93	1545.02
5	1516.88	1480.14	1468.70	1461.20	1467.70	1508.89	1533.30	1561.51	1563.52	1563.28	1558.68	1544.22
6	1515.39	1478.99	1467.01	1463.99	1470.32	1510.34	1534.25	1562.09	1563.51	1563.28	1558.41	1543.40
7	1513.86	1477.60	1464.39	1464.95	1472.74	1511.60	1534.95	1562.48	1563.54	1563.26	1558.14	1542.61
8	1512.36	1476.70	1461.34	1465.44	1474.46	1512.72	1535.86	1562.89	1563.52	1563.25	1557.91	1541.78
9	1510.78	1475.71	1460.64	1464.67	1475.98	1513.65	1537.80	1563.28	1563.51	1563.25	1557.75	1540.93
10	1509.15	1474.61	1460.67	1462.02	1477.18	1514.57	1539.78	1563.34	1563.52	1563.17	1557.40	1540.02
11	1507.54	1473.47	1459.90	1458.89	1478.19	1515.42	1541.21	1563.35	1563.51	1563.07	1557.24	1538.89
12	1506.50	1472.25	1458.94	1469.59	1479.03	1516.33	1542.54	1563.28	1563.46	1562.98	1556.91	1537.76
13	1505.44	1470.98	1457.72	1486.43	1479.85	1517.38	1544.20	1563.30	1563.62	1562.88	1556.70	1536.64
14	1504.45	1469.67	1456.24	1502.58	1480.59	1518.71	1546.47	1563.30	1563.66	1562.77	1556.43	1535.50
15	1503.54	1468.32	1454.89	1507.97	1481.22	1519.79	1548.64	1563.34	1563.66	1562.67	1555.98	1534.31
16	1502.54	1467.12	1453.15	1508.91	1481.79	1520.66	1550.09	1563.32	1563.63	1562.54	1555.52	1532.99
17	1501.55	1466.35	1451.47	1507.23	1482.38	1521.43	1551.08	1563.30	1563.65	1562.42	1555.06	1531.64
18	1500.87	1465.71	1449.72	1503.66	1483.24	1522.42	1551.96	1563.29	1563.65	1562.27	1554.62	1530.34
19	1500.76	1464.76	1449.09	1498.80	1484.68	1523.35	1552.50	1563.31	1563.66	1562.13	1554.13	1529.04
20	1499.88	1463.79	1449.59	1493.18	1486.28	1524.25	1553.24	1563.33	1563.62	1562.02	1553.64	1527.68
21	1498.64	1462.72	1450.82	1488.07	1487.60	1525.14	1554.56	1563.30	1563.62	1561.84	1553.12	1526.38
22	1497.25	1462.28	1451.77	1485.43	1488.75	1525.84	1555.12	1563.47	1563.62	1561.69	1552.61	1525.08
23	1495.94	1462.10	1452.60	1482.50	1489.87	1526.54	1555.51	1563.64	1563.59	1561.54	1552.10	1523.74
24	1494.53	1463.42	1453.19	1479.37	1490.94	1527.16	1555.88	1563.44	1563.58	1561.35	1551.62	1522.43
25	1493.77	1464.23	1453.65	1476.01	1492.09	1527.72	1556.21	1563.25	1563.67	1561.17	1551.13	1521.02
26	1492.79	1463.87	1453.93	1475.31	1494.29	1528.39	1556.50	1563.38	1563.68	1560.98	1550.55	1519.60
27	1491.76	1462.88	1453.65	1473.30	1496.51	1529.00	1556.94	1563.75	1563.64	1560.78	1550.01	1518.22
28	1490.59	1461.53	1453.23	1469.31	1498.98	1529.52	1557.48	1563.76	1563.58	1560.58	1549.46	1516.77
29	1489.24	1459.91	1453.16	1465.07	1501.22	1530.07	1558.09	1563.56	1563.52	1560.38	1548.88	1515.31
30	1488.03	1458.23	1452.95	1460.73	---	1530.62	1558.57	1563.40	1563.44	1560.17	1548.32	1513.87
31	1486.93	---	1452.84	1459.14	---	1531.10	---	1563.29	---	1559.94	1547.78	---
MEAN	1503.65	1470.00	1456.55	1475.98	1480.92	1519.45	1546.37	1562.80	1563.56	1562.22	1554.75	1532.49
MAX	1522.74	1485.49	1468.70	1508.91	1501.22	1531.10	1558.57	1563.76	1563.68	1563.37	1559.65	1547.21
MIN	1486.93	1458.23	1449.09	1453.98	1459.55	1502.98	1531.53	1559.02	1563.24	1559.94	1547.78	1513.87
(†)	225400	169000	159300	170600	257500	334600	419100	435300	435800	423800	383900	288500
(‡)	-90200	-56400	-9700	+11300	+86900	+77100	+84500	+16200	+500	-12000	-39900	-95400

CAL YR 1979 MEAN 1517.98 MAX 1566.01 MIN 1429.73 AC-FT‡ +13200
WTR YR 1980 MEAN 1519.17 MAX 1563.76 MIN 1449.09 AC-FT‡ -27100

† Contents, in acre-feet, at 2400, on last day of month.
‡ Change in contents, in acre-feet.

14181500 NORTH SANTIAM RIVER AT NIAGARA, OR

LOCATION.--Lat 44°45'10", long 122°17'50", in NE¼NE¼ sec.34, T.9 S., R.4 E., Marion County, Hydrologic Unit 17090005, on left bank 0.1 mi (0.2 km) downstream from Little Sardine Creek, 0.8 mi (1.3 km) downstream from Big Cliff Dam, 2.1 mi (3.4 km) east of Niagara, and at mile 57.3 (92.2 km).

DRAINAGE AREA.--453 mi² (1,173 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1908 to January 1920, October 1921 to March 1922, October 1938 to current year. Monthly discharge only for some periods, published in WSP 1318. Published as North Fork of Santiam River near Niagara prior to October 1913, and as "above Mayflower Creek, near Detroit" October 1938 to September 1952.

REVISED RECORDS.--WSP 1288: 1914-18, 1920. WSP 1718: 1953-54.

GAGE.--Water-stage recorder. Datum of gage is 1,093.78 ft (333.384 m) National Geodetic Vertical Datum of 1929 (Bureau of Public Roads bench mark). See WSP 1738 for history of changes prior to Oct. 1, 1952.

REMARKS.--Water-discharge records excellent. Flow regulated since 1953 by Detroit Lake (see station 14180500) and Big Cliff Reservoir, usable capacity for reregulating purposes, 2,930 acre-ft (3.61 hm³). No diversion above station.

AVERAGE DISCHARGE.--52 years (water years 1910-19, 1939-80), 2,334 ft³/s (66.10 m³/s), 69.97 in/yr (1,777 mm/yr), 1,691,000 acre-ft/yr (2.08 km³/yr), adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 63,200 ft³/s (1,790 m³/s) Nov. 22, 1909, gage height, 16.4 ft (5.00 m), from floodmark, site and datum then in use, from rating curve extended above 35,000 ft³/s (991 m³/s); minimum, 19 ft³/s (0.54 m³/s) Aug. 21, 1963; minimum daily, 395 ft³/s (11.2 m³/s) Mar. 25, 26, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,910 ft³/s (281 m³/s) Jan. 17, gage height, 7.62 ft (2.323 m); minimum, 711 ft³/s (20.1 m³/s) May 5; minimum daily, 883 ft³/s (25.0 m³/s) Mar. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2480	2910	2930	1550	1610	935	950	1420	1440	1120	989	1460
2	2480	2810	3050	1580	1010	927	920	942	1580	1220	1070	1800
3	2440	2840	4200	1570	1050	927	950	958	1240	920	989	1790
4	2420	2820	4610	1910	958	912	958	958	1370	942	981	1780
5	2410	2880	4500	2240	966	935	950	981	1340	920	1050	1760
6	2450	2780	5360	1980	1020	958	950	942	1390	935	1070	1810
7	2450	2760	5300	2290	1040	981	958	966	1440	950	1010	1670
8	2450	1950	5200	2980	1150	905	958	989	1370	942	1030	1870
9	2410	2100	2890	3620	1100	898	974	981	1360	966	981	1830
10	2480	2010	2880	4740	997	912	950	1590	1270	950	942	1810
11	2460	2050	2820	5070	1010	958	935	1550	1290	1020	1010	2250
12	1830	2100	2930	3760	997	1030	935	1560	1380	1010	1040	2240
13	1740	2020	2880	1100	920	942	974	1440	1280	966	1040	2190
14	1740	2020	3020	1010	981	1010	1010	1430	1350	1040	1040	2210
15	1750	2110	2990	4600	958	974	1010	1280	1350	1010	1330	2190
16	1730	2010	3060	6090	920	912	1500	1340	1370	997	1340	2460
17	1680	2120	3090	8350	935	927	2240	1300	1270	997	1330	2400
18	1730	2110	3110	9240	950	989	2250	1280	1300	989	1330	2420
19	2240	2100	2190	9680	950	950	2730	1250	1250	981	1380	2440
20	2620	2060	1620	9740	927	920	2780	1230	1310	997	1380	2460
21	2910	2020	1640	8600	981	950	2190	1360	1240	1040	1410	2460
22	2700	2110	1700	5050	974	942	2240	1180	1160	974	1390	2480
23	2850	2360	1790	5050	935	883	2280	1130	1160	981	1380	2380
24	2760	2780	1540	5120	935	912	2220	1490	1220	1040	1350	2330
25	2720	2860	1660	5180	935	950	1990	1810	1170	974	1290	2370
26	2890	2840	1610	2750	942	942	1810	1630	1170	981	1460	2360
27	2720	2880	1890	3440	989	927	2020	1420	1160	1020	1420	2330
28	2820	2890	1850	5080	1020	958	1990	1580	1130	1010	1410	2410
29	2850	2860	1590	5300	1040	950	1700	1800	1160	989	1470	2380
30	2760	2990	1650	5200	---	935	1290	1680	1180	989	1440	2380
31	2730	---	1530	2780	---	966	---	1450	---	989	1440	---
TOTAL	74700	73150	87080	136650	29200	29217	45612	40917	38700	30859	37792	64720
MEAN	2410	2438	2809	4408	1007	942	1520	1320	1290	995	1219	2157
MAX	2910	2990	5360	9740	1610	1030	2780	1810	1580	1220	1470	2480
MIN	1680	1950	1530	1010	920	883	920	942	1130	920	942	1460
AC-FT	148200	145100	172700	271000	57920	57950	90470	81160	76760	61210	74960	128400
MEAN†	943	1491	2651	4591	2607	2196	2941	1584	1299	800	571	555
CFSM†	2.08	3.29	5.85	10.13	5.75	4.85	6.49	3.50	2.87	1.77	1.26	1.23
IN.†	2.40	3.67	6.75	11.68	5.99	5.59	7.24	4.03	3.20	2.04	1.45	1.37
AC-FT†	58000	88700	163000	282300	144800	135000	175000	97400	77300	49200	35100	33000

CAL YR 1979 TOTAL 700285 MEAN 1919 MAX 5660 MIN 911 AC-FT 1389000 MEAN† 1937 CFSM† 4.28 IN.† 58.05 AC-FT† 1402200
WTR YR 1980 TOTAL 688597 MEAN 1881 MAX 9740 MIN 883 AC-FT 1366000 MEAN† 1844 CFSM† 4.07 IN.† 55.44 AC-FT† 1339000

† Adjusted for change in contents of Detroit Lake.

14181500 NORTH SANTIAM RIVER AT NIAGARA, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: January 1953 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 16.5°C July 28, 29, 1958; minimum, 1.0°C Jan. 30 to Feb. 4, 1979.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 14.5°C Oct. 15-18; minimum, 3.0°C on several days in January and February.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	12.5	12.5	13.0	12.5	7.5	7.5	5.5	5.5	3.0	3.0	4.5	4.5
2	13.0	12.0	13.0	12.5	7.5	7.0	5.5	5.5	3.0	3.0	4.5	4.5
3	13.0	12.5	13.0	12.5	7.5	7.0	5.5	5.5	3.0	3.0	5.0	4.5
4	13.0	13.0	12.5	12.5	7.5	7.0	5.5	5.5	3.5	3.0	5.0	4.5
5	13.5	13.0	12.5	12.0	7.0	6.5	5.5	5.5	3.5	3.5	5.0	5.0
6	13.5	13.0	12.5	12.0	7.0	7.0	5.5	5.0	3.5	3.5	5.0	4.5
7	13.5	13.0	12.5	12.0	7.0	7.0	5.0	5.0	3.5	3.5	5.0	4.5
8	13.5	13.0	12.5	11.5	7.0	7.0	5.0	5.0	3.5	3.5	5.5	5.0
9	14.0	13.5	11.5	11.5	7.0	6.5	5.0	5.0	3.5	3.5	5.5	5.0
10	14.0	14.0	11.5	11.0	6.5	6.0	5.0	5.0	3.5	3.5	5.0	5.0
11	14.0	13.5	11.5	10.5	6.0	6.0	5.0	4.5	3.5	3.5	5.0	4.5
12	14.0	13.5	11.0	10.5	6.5	6.0	5.0	5.0	3.5	3.0	5.0	4.5
13	14.0	14.0	11.0	10.5	6.5	6.0	5.5	5.0	3.5	3.0	4.5	4.5
14	14.0	14.0	10.5	10.5	6.5	6.0	6.0	5.5	3.5	3.0	4.5	4.5
15	14.5	14.0	10.5	10.5	6.0	6.0	6.0	5.0	3.5	3.0	4.5	4.0
16	14.5	14.0	10.5	10.5	6.0	6.0	5.0	5.0	3.5	3.0	4.5	4.0
17	14.5	14.0	10.5	10.0	6.5	6.0	5.0	4.5	3.5	3.0	4.5	4.5
18	14.5	14.0	10.0	9.5	6.5	6.0	4.5	4.5	3.5	3.5	5.0	4.5
19	14.0	13.5	9.5	9.5	6.0	6.0	4.5	4.5	4.0	3.5	5.0	5.0
20	14.0	13.5	9.5	9.5	6.0	6.0	4.5	4.0	4.0	3.5	5.0	5.0
21	14.0	14.0	9.5	9.0	6.0	6.0	4.5	4.0	4.0	3.5	5.0	5.0
22	14.0	14.0	9.5	9.5	6.0	5.5	4.5	4.0	4.0	3.5	5.0	5.0
23	14.0	13.5	9.5	9.0	6.0	5.5	4.0	4.0	4.0	3.5	5.0	5.0
24	14.0	14.0	9.0	8.5	6.0	5.5	4.5	4.0	4.0	4.0	5.0	5.0
25	14.0	13.5	8.5	8.0	6.0	5.5	4.5	4.0	4.5	4.0	5.0	4.5
26	14.0	13.5	8.0	8.0	6.0	5.5	4.0	4.0	4.5	4.5	5.0	4.5
27	13.5	13.0	8.0	7.5	5.5	5.5	4.0	3.5	4.5	4.5	5.0	4.5
28	13.5	13.0	8.0	7.5	5.5	5.5	4.0	3.5	4.5	4.5	5.0	4.5
29	13.5	13.0	7.5	7.5	5.5	5.5	3.5	3.0	4.5	4.5	5.0	5.0
30	13.5	13.0	7.5	7.5	5.5	5.5	3.0	3.0	---	---	5.0	5.0
31	13.0	13.0	---	---	5.5	5.5	3.0	3.0	---	---	5.0	5.0
MONTH	14.5	12.0	13.0	7.5	7.5	5.5	6.0	3.0	4.5	3.0	5.5	4.0

14181500 NORTH SANTIAM RIVER AT NIAGARA, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	5.0	4.5	6.0	5.5	7.0	6.5	8.5	7.5	8.5	8.5	10.0	9.5
2	5.0	4.5	6.0	5.5	6.5	6.5	8.0	7.5	9.0	8.5	10.0	10.0
3	5.5	5.0	6.0	5.5	6.5	6.5	8.0	7.5	9.0	8.5	10.0	10.0
4	6.0	5.5	6.5	6.0	7.0	6.5	8.0	7.5	9.0	8.5	10.0	10.0
5	6.0	5.5	6.5	6.0	7.0	7.0	7.5	7.5	9.0	8.5	10.0	10.0
6	5.5	5.0	6.5	6.0	7.0	6.5	8.0	7.5	9.5	8.5	10.5	10.0
7	5.0	5.0	6.5	6.0	7.0	6.5	8.5	7.5	9.5	8.5	10.5	10.0
8	5.0	4.5	6.5	6.0	7.0	6.5	8.0	8.0	9.0	8.5	10.5	10.5
9	5.5	5.0	6.0	6.0	7.5	7.0	8.5	8.0	10.0	9.0	11.5	10.5
10	5.5	5.5	6.0	6.0	7.0	7.0	8.5	8.0	10.0	9.0	11.5	11.0
11	6.0	5.5	6.0	5.5	7.0	7.0	8.5	8.0	9.0	9.0	11.0	11.0
12	6.5	5.5	6.0	5.5	7.0	7.0	8.0	8.0	9.0	9.0	11.0	10.5
13	6.5	6.0	6.0	6.0	7.0	6.5	8.5	8.0	9.5	9.0	11.5	10.5
14	6.5	6.0	6.0	6.0	7.0	6.5	8.0	8.0	9.0	8.5	11.5	11.0
15	6.0	5.5	6.0	6.0	7.5	7.0	8.5	7.5	9.0	8.5	11.5	11.5
16	6.5	5.5	6.0	6.0	7.0	7.0	8.5	8.0	9.0	8.5	11.5	11.5
17	6.0	5.5	6.5	6.0	7.5	7.0	8.5	8.0	9.5	9.0	12.0	11.0
18	5.5	5.0	6.5	6.0	8.0	7.5	8.0	8.0	9.0	9.0	11.5	11.5
19	5.5	5.0	6.5	6.0	8.0	7.5	8.5	8.0	9.0	8.5	12.0	11.5
20	5.5	5.0	6.5	6.5	8.0	7.5	8.5	8.0	9.5	9.0	12.5	12.0
21	5.0	5.0	6.5	6.0	8.0	7.5	9.0	8.0	9.0	9.0	12.5	12.0
22	5.5	5.0	6.0	6.0	8.0	7.5	8.5	8.0	9.0	9.0	12.5	12.0
23	5.5	5.0	6.0	6.0	7.5	7.0	8.5	8.5	9.0	9.0	12.5	12.0
24	5.5	5.0	6.0	6.0	7.5	7.0	9.0	8.0	9.0	9.0	13.0	12.0
25	6.0	5.0	6.0	6.0	7.5	7.5	9.0	8.0	9.5	9.0	13.0	12.0
26	6.0	5.5	6.0	6.0	7.5	7.0	9.0	8.0	9.5	9.0	13.0	12.5
27	6.0	5.5	6.0	6.0	7.5	7.0	9.0	8.0	9.5	9.0	13.0	12.5
28	6.0	5.5	6.5	6.0	8.0	7.5	8.5	8.5	9.5	9.0	13.0	12.5
29	5.5	5.0	6.5	6.5	8.0	8.0	9.0	8.0	10.0	9.5	13.5	13.0
30	6.0	5.5	6.5	6.0	8.5	7.5	9.0	8.5	9.5	9.5	13.5	13.0
31	---	---	6.5	6.5	---	---	9.0	8.5	9.5	9.5	---	---
MONTH	6.5	4.5	6.5	5.5	8.5	6.5	9.0	7.5	10.0	8.5	13.5	9.5

14182500 LITTLE NORTH SANTIAM RIVER NEAR MEHAMA, OR

LOCATION.--Lat 44°47'30", long 122°34'40", in NW¼ sec.16, T.9 S., R.2 E., Marion County, Hydrologic Unit 17090005, on left bank 2.0 mi (3.2 km) east of Mehama and at mile 2.0 (3.2 km).

DRAINAGE AREA.--112 mi² (290 km²) at cableway 1.2 mi (1.9 km) downstream where all discharge measurements are made.

PERIOD OF RECORD.--October 1931 to current year. Records for July to September 1924 and July to September 1931 at site 4 mi (6.4 km) upstream not equivalent owing to difference in drainage areas.

REVISED RECORDS.--WSP 754: 1932. WSP 1218: 1934, 1936, 1949-50. WSP 1935: Maximum only, 1932-34, 1936, 1938, 1943, 1945-49, 1950(M,P), 1951-53(M), 1954(M,P), 1955(M), 1956(M,P), 1957(M), 1958-59(M,P). WSP 2135: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 655.41 ft (199.769 m) National Geodetic Vertical Datum of 1929. Prior to June 12, 1948, nonrecording gage at about same site and datum.

REMARKS.--Records excellent. No regulation or diversion above station. Records herein are for measuring site.

AVERAGE DISCHARGE.--49 years, 771 ft³/s (21.83 m³/s), 93.48 in/yr (2,374 mm/yr), 558,600 acre-ft/yr (689 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 36,000 ft³/s (1,020 m³/s) Dec. 22, 1964, gage height, 16.73 ft (5.099 m), from rating curve extended above 17,000 ft³/s (481 m³/s); minimum, 13 ft³/s (0.37 m³/s) Aug. 30, 1961.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 8,200 ft³/s (232 m³/s) and maximum discharge, 10,300 ft³/s (292 m³/s) Jan. 12, gage height, 10.18 ft (3.103 m); minimum, 26 ft³/s (0.74 m³/s) Oct. 10-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	596	624	590	520	862	420	425	394	152	45	50
2	29	456	3530	642	1180	680	390	407	476	143	44	90
3	29	371	2960	1020	1870	591	369	373	725	138	44	84
4	28	552	3850	773	1150	812	369	357	656	165	43	55
5	28	1090	2590	2520	840	968	525	373	699	152	42	46
6	28	766	1560	1600	1340	976	819	341	574	136	41	43
7	28	557	1080	1010	1390	785	674	303	510	124	41	42
8	28	442	806	922	976	680	738	277	452	118	40	40
9	28	363	709	1470	764	602	1680	284	403	111	40	40
10	27	307	1160	1120	614	552	1540	299	361	109	39	39
11	26	267	800	858	535	674	1180	299	325	103	38	38
12	26	236	696	5450	471	608	1080	284	299	97	38	38
13	26	210	619	6240	425	687	1370	270	429	94	37	40
14	35	189	574	6000	386	1040	1580	254	510	90	37	41
15	58	172	672	3290	357	884	1590	244	447	83	36	40
16	46	213	666	2140	329	712	1170	250	398	81	36	38
17	38	363	590	2130	321	706	1160	225	369	79	35	37
18	92	760	568	1490	361	953	1010	213	329	76	37	40
19	1410	596	596	1090	785	877	1000	204	295	73	40	44
20	1570	510	715	869	1140	840	1070	198	270	69	37	219
21	1050	437	1240	718	826	778	1070	192	250	66	34	288
22	585	613	1300	620	632	662	826	244	231	63	34	168
23	703	1320	930	585	693	620	693	299	219	62	31	111
24	541	1780	806	608	638	563	699	306	210	59	34	88
25	715	1830	678	574	608	510	674	541	231	56	38	74
26	1010	1210	590	510	1150	535	626	1220	225	55	37	65
27	1210	858	515	429	1080	525	668	1360	207	52	38	60
28	930	672	456	394	1200	480	718	840	189	51	41	58
29	715	557	410	353	1180	476	608	597	173	49	40	56
30	613	574	379	341	---	510	490	480	163	48	39	52
31	813	---	367	329	---	476	---	407	---	46	50	---
TOTAL	12495	18867	33036	46685	23761	21624	26806	12366	11019	2800	1206	2124
MEAN	403	629	1066	1506	819	698	894	399	367	90.3	38.9	70.8
MAX	1570	1830	3850	6240	1870	1040	1680	1360	725	165	50	288
MIN	26	172	367	329	321	476	369	192	163	46	31	37
CFSM	3.60	5.62	9.52	13.4	7.31	6.23	7.98	3.56	3.28	.81	.35	.63
IN.	4.15	6.27	10.97	15.51	7.89	7.18	8.90	4.11	3.66	.93	.40	.71
AC-FT	24780	37420	65530	92600	47130	42890	53170	24530	21860	5550	2390	4210

CAL YR 1979 TOTAL 234863 MEAN 643 MAX 6050 MIN 26 CFSM 5.74 IN 78.01 AC-FT 465900
WTR YR 1980 TOTAL 212789 MEAN 581 MAX 6240 MIN 26 CFSM 5.19 IN 70.68 AC-FT 422100

14183000 NORTH SANTIAM RIVER AT MEHAMA, OR

LOCATION.--Lat 44°47'20", long 122°37'00", in NW¼ sec.18, T.9 S., R.2 E., Marion County, Hydrologic Unit 17090005, on right bank 300 ft (91 m) downstream from highway bridge at Mehama, 0.5 mi (0.8 km) downstream from Little North Santiam River, and at mile 38.71 (62.28 km).

DRAINAGE AREA.--655 mi² (1,696 km²), at cableway 0.8 mi (1.3 km) downstream, where all discharge measurements are made.

PERIOD OF RECORD.--July 1905 to March 1907, October 1910 to September 1914, September 1921 to current year. Monthly discharge only September 1921, published in WSP 1318. Prior to October 1913, published as North Fork of Santiam River at Mehama.

REVISED RECORDS.--WSP 739: 1922-23(M). WSP 1044: 1943. WSP 1248: 1906, 1911-14, 1924(M), 1926, 1934-36(M), 1937, 1938(M), 1942(M). WSP 2135: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 602.49 ft (183.639 m) National Geodetic Vertical Datum of 1929. Prior to June 15, 1933, nonrecording gage at site 100 ft (30 m) upstream at same datum.

REMARKS.--Records excellent. Flow regulated since 1953 by Detroit Lake (see station 14180500) and Big Cliff Reservoir, usable capacity for reregulating purposes, 2,930 acre-ft (3.61 hm³). No diversion above station. All records given herein are for measuring site.

AVERAGE DISCHARGE.--64 years (water years 1906, 1911-14, 1922-80), 3,362 ft³/s (95.21 m³/s), 2,436,000 acre-ft/yr (3.00 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 76,600 ft³/s (2,170 m³/s) Dec. 28, 1945, gage height, 15.37 ft (4.685 m), from rating curve extended above 36,000 ft³/s (1,020 m³/s), on basis of slope-area measurement of peak flow; maximum gage height, 17.5 ft (5.33 m) Nov. 20, 1921, from graph based on gage readings, and Jan. 6, 1923, from floodmark, at site then in use; minimum discharge, 254 ft³/s (7.19 m³/s) Aug. 3, 1970; minimum daily, 420 ft³/s (11.9 m³/s) Sept. 18, 1924.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 18,100 ft³/s (513 m³/s) Jan. 12, gage height, 8.56 ft (2.609 m); minimum, 1,020 ft³/s (28.9 m³/s) Aug. 10; minimum daily, 1,050 ft³/s (29.7 m³/s) Aug. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2460	3650	3780	2430	2630	2260	1740	2100	2090	1450	1110	1540
2	2460	3340	7860	2490	2670	2020	1660	1660	2290	1540	1180	1920
3	2430	3340	8130	2920	3450	1920	1610	1560	2400	1180	1130	1910
4	2400	3510	10800	3000	2510	2260	1640	1520	2380	1210	1100	1900
5	2380	4200	8280	5750	2190	2410	1860	1560	2320	1170	1120	1840
6	2440	3780	8130	4360	2800	2440	2290	1470	2280	1170	1150	1880
7	2430	3470	7260	3780	2920	2290	2190	1430	2250	1170	1120	1790
8	2430	2680	6790	4600	2590	2030	2230	1460	2120	1170	1120	1920
9	2400	2510	4360	5880	2310	1920	3420	1450	2030	1220	1100	1920
10	2430	2440	4530	6730	2020	1860	3310	1950	1840	1160	1050	1880
11	2430	2430	4020	6790	1920	2160	2800	2070	1830	1240	1090	2280
12	1980	2380	4020	13100	1820	2170	2620	2010	1910	1230	1120	2320
13	1710	2320	3850	11600	1690	2260	2930	1940	2010	1160	1120	2290
14	1790	2280	3910	10700	1650	3120	3290	1870	2190	1230	1130	2310
15	1790	2320	3980	10200	1610	2750	3200	1750	2090	1200	1330	2260
16	1780	2320	4040	9720	1530	2350	3070	1730	2060	1180	1430	2490
17	1740	2620	3980	12000	1530	2310	3930	1700	1910	1170	1410	2460
18	1790	3200	3980	11800	1600	2710	3870	1690	1860	1170	1430	2520
19	3550	3000	3250	11700	2090	2510	4160	1590	1780	1150	1460	2540
20	4360	2850	2590	11400	2460	2380	4480	1590	1780	1150	1470	2750
21	4040	2570	3250	10200	2160	2290	4000	1710	1670	1200	1480	2810
22	3400	2920	3380	6760	2020	2120	3590	1610	1600	1140	1460	2730
23	3590	4020	3120	6390	2090	1990	3440	1620	1540	1130	1470	2540
24	3360	5120	2850	6510	1990	1900	3420	1880	1600	1180	1430	2460
25	3570	5370	2710	6510	1940	1870	3200	2570	1640	1130	1380	2490
26	4040	4650	2550	3980	2510	1900	2780	3270	1590	1110	1530	2470
27	4070	4200	2670	4000	2470	1900	3070	3230	1550	1160	1500	2440
28	3910	3910	2570	5990	2700	1800	3090	2670	1490	1150	1490	2490
29	3720	3720	2310	6230	2710	1820	2760	2650	1490	1120	1520	2490
30	3510	3800	2260	6150	---	1830	2020	2460	1500	1120	1540	2460
31	3740	---	2160	3850	---	1790	---	2120	---	1110	1540	---
TOTAL	88130	98920	137370	217520	64580	67340	87670	59890	57090	36870	40510	68100
MEAN	2843	3297	4431	7017	2227	2172	2922	1932	1903	1189	1307	2270
MAX	4360	5370	10800	13100	3450	3120	4480	3270	2400	1540	1540	2810
MIN	1710	2280	2160	2430	1530	1790	1610	1430	1490	1110	1050	1540
AC-FT	174800	196200	272500	431500	128100	133600	173900	118800	113200	73130	80350	135100

CAL YR 1979 TOTAL 1057858 MEAN 2898 MAX 12400 MIN 978 AC-FT 2098000
WTR YR 1980 TOTAL 1023990 MEAN 2798 MAX 13100 MIN 1050 AC-FT 2031000

14185000 SOUTH SANTIAM RIVER BELOW CASCADIA, OR

LOCATION.--44°23'35", long 122°30'35", in SE¼ sec.36, T.13 S., R.2 E., Linn County, Hydrologic Unit 17090006, on left bank 100 ft (30 m) downstream from bridge at Cascadia ranger station, 0.5 mi (0.8 km) downstream from Mouse Creek, 0.5 mi (0.8 km) upstream from Deer Creek, 1.5 mi (2.4 km) southwest of Cascadia, and at mile 48.5 (78.0 km).

DRAINAGE AREA.--174 mi^2 (451 km^2), at gaging cable 0.7 mi (1.1 km) upstream.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1935 to current year. Monthly discharge only September 1935, published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 759.88 ft (231.611 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 1, 1935, nonrecording gage.

REMARKS.--Water-discharge records good. No regulation or diversion above station. All records given herein are for measuring site.

AVERAGE DISCHARGE.--45 years, 820 ft^3/s (23.22 m^3/s), 64.00 in/yr (1,626 mm/yr), 594,100 acre-ft/yr (733 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,600 ft^3/s (782 m^3/s) Dec. 22, 1964, gage height, 19.68 ft (5.998 m), from rating curve extended above 14,000 ft^3/s (396 m^3/s); minimum, 23 ft^3/s (0.65 m^3/s) Dec. 1, 2, 1936.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 5,700 ft^3/s (161 m^3/s) and maximum discharge, 12,600 ft^3/s (357 m^3/s) Jan. 12, gage height, 12.72 ft (3.877 m); minimum, 41 ft^3/s (1.16 m^3/s) Sept. 17, 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	546	578	864	500	881	579	559	584	290	73	57
2	46	415	2540	835	608	748	541	527	720	272	70	91
3	46	347	2990	939	887	681	518	491	1050	259	69	96
4	44	490	3210	901	816	863	513	470	968	269	68	69
5	44	849	2640	3520	698	924	649	449	857	259	65	58
6	44	613	1690	2280	1060	905	905	425	771	240	65	53
7	44	473	1200	1510	1200	788	833	390	743	225	61	50
8	44	393	901	1280	942	703	893	362	665	214	60	50
9	44	333	758	1380	788	629	1710	390	593	202	57	47
10	43	301	1000	1220	676	579	1730	445	531	193	56	45
11	42	268	741	1050	598	692	1440	441	487	182	53	43
12	42	241	709	7080	545	665	1320	409	453	174	51	43
13	42	220	671	8480	505	924	1530	379	496	166	50	48
14	54	207	634	7890	470	2130	1770	358	474	159	50	49
15	72	191	592	4570	433	1450	1820	342	445	154	52	47
16	65	220	546	2850	413	1010	1510	330	417	145	55	44
17	58	438	520	2450	413	949	1470	304	402	138	62	41
18	152	814	520	1790	474	1140	1320	286	370	133	68	50
19	821	592	552	1420	799	1060	1280	276	342	127	72	56
20	520	473	599	1100	851	1010	1410	266	323	123	65	102
21	456	410	908	893	743	936	1480	259	300	119	60	169
22	301	641	1060	777	681	810	1160	304	290	111	58	115
23	319	1190	901	703	771	765	987	354	315	107	57	91
24	280	2130	939	655	714	687	968	379	293	103	55	75
25	592	1890	783	603	681	639	905	676	413	100	55	68
26	467	1270	663	550	893	671	845	936	462	96	53	62
27	450	893	585	478	869	709	839	1260	421	91	52	57
28	415	694	527	440	1030	676	833	961	370	84	52	57
29	388	592	496	430	1050	660	748	754	338	81	51	57
30	377	578	478	410	---	655	629	634	311	78	49	56
31	931	---	496	398	---	618	---	545	---	75	55	---
TOTAL	7290	18712	31427	59746	21108	26557	33135	14961	15204	4969	1819	1946
MEAN	235	624	1014	1927	728	857	1105	483	507	160	58.7	64.9
MAX	931	2130	3210	8480	1200	2130	1820	1260	1050	290	73	169
MIN	42	191	478	398	413	579	513	259	290	75	49	41
CFSM	1.35	3.59	5.83	11.1	4.18	4.93	6.35	2.78	2.91	.92	.34	.37
IN.	1.56	4.00	6.72	12.77	4.51	5.68	7.08	3.20	3.25	1.06	.39	.42
AC-FT	14460	37120	62340	118500	41870	52680	65720	29680	30160	9860	3610	3860

CAL YR 1979 TOTAL 250151 MEAN 685 MAX 7260 MIN 42 CFSM 3.94 IN 53.48 AC-FT 496200
WTR YR 1980 TOTAL 236874 MEAN 647 MAX 8480 MIN 41 CFSM 3.72 IN 50.64 AC-FT 469800

14185000 SOUTH SANTIAM RIVER BELOW CASCADIA, OR --Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: June 1962 to July 1967, February 1969 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 25.0°C July 30, Aug. 7, 1965; minimum, 0.0°C at times during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 21.5°C July 22, 28; minimum, 0.0°C Jan. 27-31.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	16.0	12.5	7.0	5.5	7.0	6.0	7.0	6.0	3.5	2.0	7.5	6.0
2	16.0	13.0	7.5	6.5	7.5	7.0	6.5	5.5	4.5	3.5	8.0	7.0
3	16.0	13.0	7.5	6.5	8.0	7.5	6.5	6.0	5.0	4.5	7.5	7.0
4	16.0	13.0	7.0	6.5	8.0	7.0	7.0	6.5	5.0	4.0	8.0	7.0
5	16.0	13.5	6.5	6.0	7.0	6.0	7.0	5.5	5.5	4.5	7.5	7.0
6	15.5	13.5	---	---	6.5	5.5	5.5	4.5	5.5	5.5	7.5	6.5
7	15.0	14.5	---	---	6.5	5.5	4.5	4.0	5.5	5.0	7.5	6.0
8	16.0	14.5	---	---	7.0	6.0	4.5	3.5	5.0	4.0	7.5	6.5
9	15.5	13.5	---	---	7.5	6.5	5.0	4.0	5.0	4.0	7.0	5.0
10	14.5	12.5	---	---	7.0	5.0	4.0	3.5	5.5	4.5	7.0	6.0
11	14.0	11.5	---	---	5.0	3.5	4.5	3.0	5.0	3.5	7.0	5.0
12	14.0	11.5	---	---	5.0	4.0	6.0	4.5	4.5	3.5	6.0	4.5
13	14.5	12.0	---	---	6.0	4.5	6.5	6.0	5.0	3.5	6.0	5.5
14	14.0	13.0	---	---	6.5	6.0	6.5	6.0	5.0	4.5	5.5	5.0
15	14.0	13.5	---	---	6.5	5.5	6.0	5.5	6.0	5.0	5.5	4.5
16	14.0	13.0	---	---	6.0	4.5	6.5	6.0	6.0	5.0	6.0	4.5
17	13.5	12.5	---	---	7.5	6.0	6.5	5.0	7.0	5.5	6.5	5.0
18	12.5	11.0	---	---	7.5	7.5	5.0	3.5	7.0	6.5	6.5	5.0
19	11.0	10.5	---	---	7.5	7.5	3.5	3.0	7.0	6.0	7.0	5.5
20	10.5	9.5	---	---	7.5	7.0	4.0	3.0	6.5	6.0	6.5	6.0
21	10.0	9.0	---	---	7.0	5.5	4.5	3.5	5.5	4.5	6.0	5.0
22	10.5	9.5	---	---	5.5	5.0	4.5	4.0	6.0	4.5	7.0	5.5
23	11.0	10.0	---	---	5.5	5.0	4.5	4.0	6.5	5.0	6.5	5.5
24	11.5	10.5	---	---	6.0	5.5	5.0	4.0	7.5	6.0	7.0	5.0
25	11.5	10.5	---	---	6.5	5.5	4.5	4.0	7.5	6.5	7.0	4.5
26	10.5	10.0	---	---	6.0	5.0	4.5	2.0	8.0	7.5	6.0	5.5
27	10.5	10.0	5.0	---	5.0	4.0	2.0	.0	8.0	7.5	6.5	5.0
28	10.0	9.0	5.5	4.5	5.5	4.0	.0	.0	8.0	7.0	7.0	4.5
29	9.0	8.0	6.0	5.0	5.5	5.5	.0	.0	7.0	5.5	6.5	5.5
30	8.5	7.5	6.5	6.0	6.5	5.5	.0	.0	---	---	6.5	5.0
31	8.0	6.5	---	---	7.0	6.0	2.0	.0	---	---	6.0	5.0
MONTH	16.0	6.5	7.5	4.5	8.0	3.5	7.0	.0	8.0	2.0	8.0	4.5

14185000 SOUTH SANTIAM RIVER BELOW CASCADIA, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.5	5.0	11.5	7.5	12.0	9.5	16.5	13.0	20.5	17.5	17.0	13.5
2	7.0	4.5	10.5	9.0	9.5	8.0	16.0	14.0	19.0	17.5	16.5	15.0
3	6.5	4.5	11.5	7.5	10.0	7.5	16.0	13.0	20.5	17.5	15.0	13.0
4	7.5	6.0	13.0	9.0	11.0	7.5	13.0	12.5	19.5	17.0	16.0	13.0
5	7.5	6.0	12.0	10.0	11.0	8.5	13.5	12.0	19.5	17.0	17.0	13.5
6	6.5	4.5	11.0	9.0	10.0	8.5	16.5	12.5	18.5	15.5	17.0	14.5
7	6.0	4.0	11.5	8.0	11.0	8.5	17.0	14.0	19.0	15.5	17.5	15.0
8	6.5	5.5	11.0	9.0	13.0	10.0	17.5	15.0	19.5	16.5	17.5	14.0
9	6.5	5.5	9.5	8.5	13.0	10.5	17.0	15.0	20.5	17.0	18.0	14.0
10	7.0	5.5	9.0	7.5	13.5	10.5	17.0	14.0	20.5	17.5	18.5	15.0
11	8.5	5.0	9.0	7.5	12.5	10.5	16.5	14.5	21.0	18.0	18.5	15.5
12	9.5	6.0	10.0	8.5	11.0	10.5	18.0	15.0	20.0	17.5	16.5	15.0
13	9.5	6.0	10.0	9.0	10.5	10.0	17.5	15.0	19.0	16.5	15.0	13.0
14	7.5	6.5	10.0	8.5	10.0	9.5	18.0	16.0	19.0	16.5	14.5	12.5
15	8.5	6.0	10.0	8.5	14.0	9.5	18.5	15.0	18.0	15.5	15.0	12.0
16	9.5	5.5	11.0	7.5	13.5	11.0	18.5	16.0	19.0	16.0	16.0	12.5
17	8.5	6.5	12.5	9.0	14.5	10.5	18.5	16.0	19.0	16.0	16.0	12.5
18	9.5	6.0	12.5	10.5	15.0	11.5	18.5	16.0	18.0	15.5	14.5	13.5
19	8.5	7.0	13.0	10.5	15.0	11.5	19.0	16.0	17.5	14.5	14.5	13.5
20	7.5	6.5	14.0	11.0	14.5	12.5	20.0	16.5	18.0	14.5	13.5	13.0
21	6.5	6.0	13.5	11.0	14.5	13.0	21.0	18.0	17.5	14.5	13.0	12.5
22	7.5	6.0	11.0	9.0	14.0	12.5	21.5	19.0	18.0	14.5	12.5	11.0
23	8.5	7.0	9.5	8.0	13.0	12.0	20.5	18.5	18.5	14.5	13.5	11.5
24	8.5	7.0	9.0	8.0	13.0	12.0	20.0	17.5	17.5	15.0	14.0	12.0
25	9.5	6.0	8.5	7.5	12.5	11.5	20.0	17.0	18.0	14.0	14.5	12.0
26	11.0	7.5	8.0	7.0	12.0	10.0	20.5	17.5	17.5	14.5	15.0	13.0
27	12.0	8.0	9.0	7.5	15.0	10.5	21.0	18.0	17.0	15.0	14.0	13.0
28	11.0	9.0	11.5	8.0	15.0	11.5	21.5	18.5	17.0	14.0	15.0	13.0
29	9.0	7.0	10.0	8.5	15.5	12.5	21.0	18.5	16.5	13.5	15.0	12.5
30	10.0	6.5	12.0	9.0	15.5	12.0	20.0	17.5	14.5	13.0	15.0	13.0
31	---	---	13.0	9.5	---	---	21.0	18.0	16.5	13.5	---	---
MONTH	12.0	4.0	14.0	7.0	15.5	7.5	21.5	12.0	21.0	13.0	18.5	11.0

14185800 MIDDLE SANTIAM RIVER NEAR CASCADIA, OR

LOCATION.--Lat 44°30'55", long 122°22'15", in NE¼ sec.19, T.12 S., R.4 E., Linn County, Hydrologic Unit 17090006, on right bank 5.6 mi (9.0 km) downstream from Bear Creek, 10 mi (16 km) northeast of Cascadia, and at mile 17.5 (28.2 km).

DRAINAGE AREA.--104 mi² (269 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,040 ft (320 m), from topographic map.

REMARKS.--Water-discharge records excellent. No regulation or diversion above station.

AVERAGE DISCHARGE.--17 years, 634 ft³/s (17.95 m³/s), 82.79 in/yr (2,103 mm/yr), 459,300 acre-ft/yr (566 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,900 ft³/s (649 m³/s) Dec. 22, 1964, gage height, 15.75 ft (4.801 m), from floodmark, from rating curve extended above 7,000 ft³/s (198 m³/s) on basis of slope-area measurement of peak flow; minimum, 28 ft³/s (0.79 m³/s) Oct. 17, 26, 27, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 4,500 ft³/s (127 m³/s) and maximum discharge, 6,340 ft³/s (180 m³/s) Jan. 14, gage height, 8.50 ft (2.591 m); minimum, 37 ft³/s (1.05 m³/s) Oct. 10, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	386	495	623	483	779	400	487	336	180	80	56
2	43	307	2050	632	651	681	376	456	475	170	79	88
3	40	260	2050	732	987	623	366	422	568	170	79	76
4	38	400	2440	671	851	817	373	404	520	190	77	62
5	38	642	1840	2070	737	823	475	393	491	170	76	57
6	38	472	1250	1470	1090	763	604	366	441	160	73	55
7	38	369	932	1040	1080	676	529	333	430	150	73	54
8	39	307	742	903	885	609	681	310	390	146	70	53
9	38	263	686	932	752	546	1250	326	356	142	70	51
10	37	233	784	774	656	508	1200	336	326	139	68	50
11	37	207	623	676	586	541	1030	326	301	136	67	49
12	38	187	577	3370	529	491	1020	304	289	131	66	49
13	38	171	529	5160	483	613	1210	286	326	127	66	53
14	45	158	504	5390	448	784	1430	272	317	124	66	52
15	60	148	504	3310	415	651	1480	260	304	121	65	50
16	49	185	475	2140	393	555	1260	249	283	118	65	48
17	45	349	483	1840	390	563	1230	233	272	115	62	47
18	110	483	468	1380	456	613	1120	223	255	112	69	52
19	604	369	524	1080	721	590	1090	212	241	108	68	59
20	487	320	618	885	840	623	1170	205	228	107	63	112
21	397	286	768	752	686	590	1130	202	215	104	59	108
22	274	460	747	671	623	537	914	233	207	101	58	77
23	266	737	647	623	642	520	801	255	210	96	57	66
24	220	1550	600	609	609	479	790	272	205	95	56	61
25	362	1310	537	572	632	460	737	408	277	92	55	57
26	323	891	487	520	862	483	701	563	274	91	54	54
27	386	666	448	456	823	468	711	651	241	89	55	52
28	352	541	411	415	926	437	721	499	217	86	55	53
29	295	468	386	397	920	448	642	415	202	84	53	51
30	310	487	366	386	---	452	541	366	190	82	54	50
31	568	---	369	356	---	430	---	323	---	82	59	---
TOTAL	5658	13612	24340	40835	20156	18153	25982	10590	9387	3818	2017	1802
MEAN	183	454	785	1317	695	586	866	342	313	123	65.1	60.1
MAX	604	1550	2440	5390	1090	823	1480	651	568	190	80	112
MIN	37	148	366	356	390	430	366	202	190	82	53	47
CFSM	1.76	4.37	7.55	12.7	6.68	5.64	8.33	3.29	3.01	1.18	.63	.58
IN.	2.02	4.87	8.71	14.61	7.21	6.49	9.29	3.79	3.36	1.37	.72	.64
AC-FT	11220	27000	48280	81000	39980	36010	51540	21010	18620	7570	4000	3570

CAL YR 1979 TOTAL 185265 MEAN 508 MAX 4010 MIN 37 CFSM 4.89 IN 66.27 AC-FT 367500
WTR YR 1980 TOTAL 176350 MEAN 482 MAX 5390 MIN 37 CFSM 4.64 IN 63.08 AC-FT 349800

14185800 MIDDLE SANTIAM RIVER NEAR CASCADIA, OR

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: August 1963 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 22.5°C AUG. 2, 3, 6, 11-13, 16, 17, 1977; minimum, 0.0°C several days in 1978-79.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 21.0°C July 20, 21; minimum not determined; minimum recorded, 2.0°C Dec. 11, 12.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	14.0	12.5	7.5	6.0	5.0	4.0			---	---	6.5	5.0
2	14.0	11.5	8.0	7.0	5.5	5.0			---	---	6.5	6.0
3	13.0	12.0	8.0	7.5	5.5	5.5			---	---	6.5	6.0
4	13.5	12.0	8.0	8.0	6.0	5.5			---	---	6.5	6.0
5	14.0	12.0	8.0	7.5	5.5	4.5			---	---	6.0	5.5
6	14.0	13.0	8.0	7.0	4.5	4.0			5.5	4.5	6.0	5.5
7	13.5	13.5	7.5	7.0	5.0	4.0			5.0	4.5	6.0	5.5
8	14.5	13.0	7.0	5.5	5.0	4.0			5.0	4.0	6.5	5.5
9	13.0	12.0	6.0	5.0	5.0	4.5			5.0	4.0	6.5	5.0
10	12.5	11.0	5.5	4.5	5.0	3.0			5.0	4.5	6.0	5.0
11	12.0	10.5	5.0	4.0	3.0	2.0			4.5	4.0	5.5	4.0
12	12.0	10.5	4.5	4.0	3.0	2.0			4.5	3.5	5.0	4.0
13	12.5	11.0	4.5	4.0	3.5	2.5			5.0	3.5	4.5	4.0
14	12.0	12.0	4.5	4.0	4.0	3.5			5.0	4.0	4.0	3.5
15	13.0	12.0	5.0	4.0	4.0	3.5			5.5	4.5	4.0	3.0
16	12.5	11.5	6.5	5.0	3.5	2.5			5.5	5.0	5.0	3.5
17	12.5	10.5	7.0	6.5	5.0	3.5			6.0	5.0	5.0	4.0
18	11.0	10.0	6.5	4.0	5.0	4.5			6.0	5.5	5.5	4.0
19	10.0	9.0	5.0	4.5	5.0	5.0			6.0	5.5	6.0	4.5
20	9.0	8.0	4.5	3.5	5.0	4.5			5.5	5.0	5.5	4.5
21	9.0	8.0	4.0	3.0	4.5	3.0			5.0	4.5	5.0	4.5
22	9.0	8.5	5.0	4.0	3.0	2.5			5.0	4.5	6.0	4.5
23	10.0	9.0	5.0	4.5	2.5	2.5			5.5	4.0	5.5	4.5
24	10.0	9.5	5.5	4.5	3.0	2.5			6.5	5.0	6.0	4.5
25	10.5	10.0	4.5	4.0	---	---			6.0	6.0	6.0	4.0
26	10.0	9.5	4.5	3.5	---	---			6.5	6.0	5.0	4.0
27	9.5	9.0	4.0	3.0	---	---			7.0	6.5	6.0	4.0
28	9.0	8.5	3.0	2.5	---	---			6.5	6.0	6.0	4.0
29	8.5	8.0	4.0	2.5	---	---			6.0	5.0	5.5	4.5
30	8.5	7.5	4.5	4.0	---	---			---	---	6.0	4.0
31	8.0	7.5	---	---	---	---			---	---	5.5	4.0
MONTH	14.5	7.5	8.0	2.5	6.0	2.0			7.0	3.5	6.5	3.0

14185800 MIDDLE SANTIAM RIVER NEAR CASCADIA, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.0	4.5	10.5	6.5	12.0	9.5	17.0	13.0	19.5	16.0	16.0	12.5
2	6.5	3.5	9.5	7.5	9.5	8.0	17.0	14.0	19.0	15.5	16.0	14.0
3	6.0	3.5	10.5	6.5	10.0	7.5	16.0	13.5	19.0	15.5	14.5	11.5
4	6.5	5.0	12.0	8.0	10.5	8.0	13.5	12.5	18.5	15.0	15.5	12.0
5	6.0	5.5	10.5	9.0	10.5	8.5	14.0	12.0	17.5	15.0	16.5	13.0
6	5.0	3.0	10.0	8.0	10.0	9.0	17.0	12.5	17.0	13.5	16.5	13.5
7	5.0	3.0	11.0	7.0	11.0	9.0	17.5	13.5	18.0	14.0	18.0	15.0
8	5.5	4.5	10.0	8.5	12.5	10.0	17.5	15.0	18.5	15.0	16.0	12.5
9	5.5	5.0	9.0	7.5	13.0	10.5	16.5	14.5	18.5	15.0	17.0	13.5
10	6.5	4.0	8.0	7.0	13.5	10.0	17.0	13.5	18.5	15.5	17.5	14.5
11	7.0	4.0	9.5	7.5	12.5	10.5	16.5	13.5	19.5	16.0	17.0	14.0
12	8.0	5.0	10.5	8.0	11.0	10.5	17.5	14.5	18.0	15.0	15.5	14.5
13	8.0	5.0	10.0	8.5	10.5	9.5	17.5	14.0	18.5	15.0	14.5	12.0
14	6.5	5.5	10.0	8.0	10.0	9.5	16.5	15.0	18.0	15.5	13.5	11.0
15	7.0	5.0	10.0	8.5	14.0	9.5	18.0	14.0	16.0	14.0	14.0	11.0
16	8.0	5.0	11.0	7.0	13.5	11.0	18.5	15.0	18.0	14.5	14.5	11.5
17	7.5	5.5	12.5	8.5	14.5	10.5	18.5	14.5	17.0	14.5	14.5	12.0
18	8.0	5.5	12.5	9.5	15.0	11.5	18.5	15.5	15.5	14.0	14.0	13.5
19	7.0	6.5	13.0	10.0	15.5	11.5	18.5	15.0	16.0	12.5	13.5	12.5
20	6.5	6.0	13.5	10.0	15.5	13.0	20.0	15.5	17.0	13.5	12.5	12.0
21	6.0	5.5	12.5	10.0	14.5	13.0	21.0	17.0	17.0	13.0	12.5	11.0
22	7.0	5.5	10.0	8.5	14.5	12.5	21.0	18.0	17.0	13.0	12.0	10.0
23	7.5	6.0	9.5	7.5	13.0	11.5	20.5	17.5	17.5	13.5	13.0	10.5
24	7.5	6.5	8.5	7.5	13.0	11.5	19.5	16.0	17.5	14.5	13.5	11.0
25	9.0	5.5	8.5	7.5	13.0	11.5	19.5	15.5	17.5	13.5	14.0	11.5
26	10.0	6.5	8.0	7.0	12.0	10.5	20.0	16.0	16.5	14.0	14.0	12.0
27	11.0	7.0	8.5	7.5	15.0	10.5	20.5	16.5	16.0	14.5	13.5	12.5
28	9.0	7.5	11.5	8.0	16.0	12.0	20.5	17.0	16.5	13.5	14.0	12.5
29	8.0	6.5	10.0	8.5	16.0	12.5	20.0	16.5	15.0	12.5	13.5	11.5
30	8.5	6.0	12.5	9.0	16.0	12.0	19.5	15.5	13.5	12.0	14.5	12.5
31	---	---	13.0	9.5	---	---	20.0	16.5	16.0	13.0	---	---
MONTH	11.0	3.0	13.5	6.5	16.0	7.5	21.0	12.0	19.5	12.0	18.0	10.0

14185900 QUARTZVILLE CREEK NEAR CASCADIA, OR

LOCATION.--Lat 44°32'25", long 122°26'05", in NW¼ sec.10, T.12 S., R.3 E., Linn County, Hydrologic Unit 17090006, on Bureau of Land Management land, on right bank 80 ft (24 m) downstream from Panther Creek, 10 mi (16 km) north of Cascadia, and at mile 6.6 (10.6 km).

DRAINAGE AREA.--99.2 mi² (256.9 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1963 to November 1964 (destroyed by flood of December 1964); October 1965 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 1,050 ft (320 m), from topographic map. Aug. 13, 1963, to Dec. 22, 1964, water-stage recorder on left bank at present datum.

REMARKS.--Water-discharge records good except those for period of no gage-height record Apr. 8 to May 13, which are fair. No regulation or diversion above station.

AVERAGE DISCHARGE.--16 years (water years 1964, 1966-80), 672 ft³/s (19.03 m³/s), 91.99 in/yr (2,337 mm/yr), 486,900 acre-ft/yr (600 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,400 ft³/s (634 m³/s) Jan. 20, 1972, gage height, 16.38 ft (4.993 m); minimum, 14 ft³/s (0.40 m³/s) Aug. 19-23, 1973.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 36,500 ft³/s (1,030 m³/s) Dec. 22, 1964, from slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,500 ft³/s (127 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 2	1000	5,750	163	10.50	3.200	Jan. 12	1700	*9,780	277	*12.41	3.782

Minimum, 18 ft³/s (0.51 m³/s) Oct. 10-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	458	501	933	458	861	355	460	240	131	56	39
2	20	317	3800	831	921	661	323	410	345	123	55	64
3	19	251	2660	1020	1360	571	304	390	556	117	53	56
4	19	615	2960	791	849	1060	323	360	471	137	52	41
5	19	1130	1940	2830	661	990	566	330	450	127	52	39
6	19	672	1120	1470	1310	849	831	290	374	115	51	37
7	19	437	786	915	1210	672	610	260	355	108	50	36
8	19	323	600	837	837	547	860	240	317	104	50	34
9	19	257	561	1270	651	454	1300	260	281	101	49	33
10	18	215	763	878	528	409	1230	270	254	97	48	32
11	18	186	547	731	450	488	980	240	234	94	47	31
12	18	162	488	6440	389	445	970	220	220	91	46	31
13	18	146	437	7000	348	814	1200	197	260	88	46	33
14	22	131	413	6290	317	946	1500	184	269	86	46	32
15	29	121	437	3230	288	687	1600	172	254	85	45	30
16	25	184	413	2030	269	519	1300	162	231	82	45	30
17	22	479	385	1840	278	561	1200	153	220	79	43	29
18	117	731	363	1200	355	769	1080	148	202	78	46	32
19	791	479	433	884	803	682	1050	142	189	75	46	39
20	884	378	630	693	915	736	1140	133	176	73	43	106
21	571	313	1190	566	693	693	1120	131	164	72	42	89
22	313	808	1040	501	576	552	890	164	155	69	41	55
23	359	1190	780	497	698	533	770	184	150	67	40	43
24	269	2030	861	519	672	462	700	194	144	64	39	39
25	580	1430	682	479	640	433	660	348	179	64	39	37
26	515	896	552	409	1310	471	670	571	197	63	39	34
27	580	630	466	341	1080	466	680	610	179	62	37	33
28	466	488	401	297	1240	409	710	429	160	61	39	32
29	348	401	363	272	1200	417	600	330	148	58	37	32
30	385	454	341	263	---	445	500	281	137	57	37	31
31	837	---	359	248	---	397	---	248	---	57	40	---
TOTAL	7359	16312	27272	46505	21306	18999	26022	8511	7511	2685	1399	1229
MEAN	237	544	880	1500	735	613	867	275	250	86.6	45.1	41.0
MAX	884	2030	3800	7000	1360	1060	1600	610	556	137	56	106
MIN	18	121	341	248	269	397	304	131	137	57	37	29
CFSM	2.39	5.48	8.87	15.1	7.41	6.18	8.74	2.77	2.52	.87	.46	.41
IN.	2.76	6.12	10.23	17.44	7.99	7.12	9.76	3.19	2.82	1.01	.52	.46
AC-FT	14600	32350	54090	92240	42260	37680	51610	16880	14900	5330	2770	2440

CAL YR 1979 TOTAL 194041 MEAN 532 MAX 6610 MIN 18 CFSM 5.36 IN 72.76 AC-FT 384900
WTR YR 1980 TOTAL 185110 MEAN 506 MAX 7000 MIN 18 CFSM 5.10 IN 69.42 AC-FT 367200

14185900 QUARTZVILLE CREEK NEAR CASCADIA, OR-- Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: August 1963 to November 1964, October 1965 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 25.5°C Aug. 10, 11, 1971; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 23.0°C July 21, 22; minimum, 0.0°C Jan. 27-31.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	14.5	13.0	7.0	5.5	6.0	5.0	6.5	6.0	3.0	1.5	7.0	5.5
2	14.0	12.5	7.5	6.5	7.0	6.0	6.0	5.5	4.5	2.5	8.0	6.5
3	14.0	12.0	8.0	7.0	7.5	7.0	6.5	5.5	5.5	4.5	7.0	6.5
4	14.0	12.5	8.0	7.5	7.5	6.5	6.5	6.0	5.0	4.5	7.5	6.5
5	14.0	12.5	8.0	7.5	6.5	6.0	6.5	5.0	5.5	4.5	7.0	6.5
6	14.0	13.0	8.0	7.0	6.0	5.5	5.0	4.0	5.5	5.0	7.0	6.0
7	14.0	13.5	7.5	6.5	6.5	5.5	4.0	2.5	5.5	5.0	7.5	6.0
8	14.5	13.5	6.5	5.5	6.5	5.5	4.0	2.5	5.0	4.0	7.0	6.0
9	14.0	12.5	6.0	5.5	7.0	6.0	4.5	4.0	5.5	4.0	7.5	5.5
10	13.0	11.5	6.0	5.0	6.5	4.5	4.0	2.5	5.5	4.5	7.0	6.0
11	13.0	11.5	5.0	4.0	4.5	3.5	4.0	3.0	5.0	3.5	6.5	4.5
12	12.5	11.5	5.0	4.0	4.5	3.5	5.5	4.0	5.0	3.5	5.0	4.0
13	13.0	11.5	5.0	4.0	5.5	4.5	6.0	5.5	5.0	3.5	5.5	4.5
14	12.5	12.5	5.0	4.0	6.0	5.0	6.0	5.5	5.0	4.0	5.0	4.0
15	13.5	12.0	5.5	4.0	6.0	5.5	5.5	5.0	6.0	4.5	4.5	3.5
16	13.0	12.0	7.0	5.5	5.5	4.5	6.0	5.5	6.0	5.5	6.0	4.0
17	12.5	11.0	7.0	6.5	6.5	5.5	5.5	4.5	6.5	5.5	5.5	4.5
18	11.0	9.5	6.5	5.0	7.0	6.5	4.5	3.5	6.5	6.0	6.5	4.5
19	9.5	8.0	6.0	5.0	7.0	7.0	3.5	3.0	6.5	5.5	6.5	5.0
20	8.0	7.5	5.0	4.5	7.0	6.5	4.0	3.0	6.0	5.0	6.0	5.5
21	8.5	7.5	5.0	4.0	6.5	5.5	4.5	3.5	5.5	4.5	6.0	5.0
22	8.5	8.0	6.0	5.0	5.5	4.5	4.5	4.0	5.5	4.0	7.0	5.5
23	9.5	8.5	6.0	5.5	5.0	4.5	4.5	4.0	6.0	4.5	6.5	5.0
24	9.5	8.5	6.5	5.5	5.5	5.0	5.0	4.0	7.0	5.5	7.0	5.0
25	9.5	9.0	5.5	5.0	6.0	5.5	4.5	4.0	6.5	6.0	7.0	4.5
26	9.5	8.5	5.0	4.5	5.5	5.0	4.0	1.5	7.0	6.5	5.5	5.0
27	9.5	8.5	5.0	4.0	5.0	4.0	1.0	.0	7.5	7.0	7.0	4.5
28	8.5	8.0	5.0	3.5	5.0	4.0	.0	.0	7.0	6.5	7.0	4.0
29	8.0	7.5	5.5	4.0	5.5	5.0	.0	.0	7.0	5.5	6.0	5.0
30	8.0	7.0	6.0	5.0	6.0	5.0	.0	.0	---	---	7.0	4.5
31	7.5	7.0	---	---	6.0	5.5	1.5	.0	---	---	6.0	4.5
MONTH	14.5	7.0	8.0	3.5	7.5	3.5	6.5	.0	7.5	1.5	8.0	3.5

14185900 QUARTZVILLE CREEK NEAR CASCADIA, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.5	4.5	12.0	7.5	13.0	10.0	18.0	13.5	21.5	17.5	16.0	13.0
2	6.5	4.0	11.0	9.0	10.0	8.0	18.0	15.0	21.0	17.0	17.0	14.5
3	6.5	4.0	12.5	7.5	10.0	7.0	16.5	13.5	20.5	16.5	15.5	12.5
4	7.5	5.5	14.0	9.0	11.0	7.5	14.0	13.0	20.0	16.0	16.5	13.0
5	6.5	5.5	12.0	10.5	10.0	8.0	14.0	12.5	19.0	16.5	17.0	14.0
6	5.5	4.0	11.5	9.5	10.0	8.5	17.0	12.0	18.5	14.5	17.0	14.5
7	6.0	3.5	13.0	8.5	11.5	8.5	18.5	14.0	19.5	15.0	18.0	15.5
8	6.0	5.0	12.0	10.0	13.0	10.0	19.0	16.0	20.0	16.5	16.5	14.0
9	6.0	5.5	10.5	9.0	13.0	11.0	17.5	16.0	20.5	16.5	17.5	14.5
10	7.0	5.0	9.5	8.5	14.5	10.5	18.5	15.0	20.0	17.0	18.0	15.5
11	8.5	4.5	10.0	8.0	13.0	11.0	17.0	15.0	20.5	17.5	17.5	15.0
12	9.0	5.5	11.0	9.0	11.0	10.5	17.5	15.5	20.0	17.0	16.5	15.5
13	9.0	5.5	11.0	9.5	10.5	9.5	19.0	15.0	20.0	16.5	15.5	13.5
14	6.5	6.0	11.0	9.0	10.0	9.5	17.0	16.0	19.5	17.0	14.5	12.0
15	8.0	5.5	11.0	9.0	14.5	9.5	19.5	14.5	17.5	15.5	14.5	12.0
16	9.5	5.5	12.5	7.5	13.5	11.5	20.0	16.0	19.0	16.0	15.0	12.5
17	8.0	6.0	14.0	9.5	15.0	10.5	20.0	16.0	18.0	15.5	15.5	13.0
18	9.0	5.5	14.0	11.0	16.0	11.5	20.0	16.5	17.0	15.5	15.0	14.0
19	8.0	7.0	14.5	11.5	16.5	12.0	20.5	16.5	17.5	13.5	14.0	13.5
20	7.5	6.5	15.5	12.0	16.5	13.5	21.5	17.0	18.0	14.5	13.5	12.5
21	6.5	6.0	14.0	11.5	15.5	13.5	23.0	18.0	17.0	13.5	13.0	11.5
22	7.5	6.0	11.5	10.0	14.5	13.0	23.0	19.5	17.5	14.0	13.0	10.5
23	8.5	6.5	10.5	8.5	14.5	12.5	22.5	19.0	18.0	14.5	13.5	11.0
24	8.5	7.0	10.0	8.5	13.5	12.5	21.0	17.0	17.0	15.0	14.0	11.5
25	10.0	6.0	9.0	8.0	13.0	12.0	21.5	17.0	17.5	14.0	14.5	12.0
26	11.5	7.5	8.0	7.5	12.5	10.5	21.5	17.0	17.0	14.5	14.5	12.5
27	13.0	8.0	9.0	7.5	15.5	10.5	22.5	17.5	16.5	15.0	14.0	13.0
28	10.5	9.0	11.5	8.0	16.5	12.5	22.5	18.5	16.5	14.0	14.5	13.0
29	9.5	7.0	10.0	8.5	17.0	13.5	22.0	18.0	15.5	13.0	14.0	12.5
30	10.5	6.5	13.0	9.0	17.0	13.0	21.5	17.0	14.5	13.0	14.5	13.0
31	---	---	14.0	10.0	---	---	21.5	18.0	16.5	13.5	---	---
MONTH	13.0	3.5	15.5	7.5	17.0	7.0	23.0	12.0	21.5	13.0	18.0	10.5

14186100 GREEN PETER LAKE NEAR FOSTER, OR

LOCATION.--Lat 44°27'10", long 122°32'40", in NE¼SE¼ sec.10, T.13 S., R.2 E., Linn County, Hydrologic Unit 17090006, in Green Peter Dam on Middle Santiam River 7.0 mi (11.3 km) northeast of Foster and at mile 5.7 (9.2 km).

DRAINAGE AREA.--273 mi² (707 km²).

PERIOD OF RECORD.--October 1966 to current year. Prior to October 1971, published as Green Peter Reservoir near Foster.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by concrete, gravity-type dam with ogee spillway completed in 1966 by Corps of Engineers; controlled storage began Oct. 6, 1966. Total capacity, 428,100 acre-ft (528 hm³) usable capacity 330,800 acre-ft (408 hm³) between elevations 887.0 ft (270.36 m), proposed lower limit of operation, and 1,015.0 ft (309.37 m), top of spillway gates. Reservoir used for flood control, power development, improvement of navigation, pollution abatement, and other purposes. Figures given herein represent total contents.

COOPERATION.--Midnight elevations furnished by Corps of Engineers and reviewed by Geological Survey. Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 417,700 acre-ft (515 hm³) June 18, 1977, elevation, 1,012.17 ft (308.509 m); minimum, 116,900 acre-ft (144 hm³) Dec. 15, 1972, elevation, 899.20 ft (274.076 m).

EXTREMES FOR CURRENT YEAR.--Maximun contents, 415,300 acre-ft (512 hm³) June 27, elevation, 1,011.50 ft (308.305 m); minimum, 166,000 acre-ft (205 hm³) Dec. 19, elevation, 924.95 ft (281.952 m).

Capacity table (elevation, in feet, and total contents, in acre-feet)

899	116,600	960	251,100
900	118,300	980	309,700
920	115,700	1,000	374,800
940	199,900	1,013	420,700

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	977.76	963.74	943.61	925.84	927.15	958.07	987.05	1005.69	1008.41	1010.95	1005.08	993.88
2	977.27	962.76	947.12	926.33	928.20	958.94	987.55	1006.13	1008.96	1010.88	1004.72	993.62
3	976.75	961.70	948.84	927.05	930.23	959.72	988.03	1006.53	1009.70	1010.83	1004.36	993.22
4	976.26	961.18	950.52	927.21	931.60	961.02	988.55	1006.88	1010.10	1010.76	1003.99	992.86
5	975.73	961.09	950.77	931.58	932.67	962.29	989.32	1007.19	1010.53	1010.65	1003.61	992.48
6	975.22	960.40	949.68	933.32	934.81	963.33	990.46	1007.45	1010.88	1010.54	1003.28	992.10
7	974.82	959.71	947.94	934.04	936.83	964.21	991.34	1007.69	1011.02	1010.51	1002.94	991.71
8	974.31	958.88	945.85	934.68	938.23	965.04	992.50	1007.68	1011.07	1010.41	1002.62	991.34
9	973.79	957.92	943.69	934.90	939.26	965.72	994.73	1007.75	1011.07	1010.30	1002.29	990.89
10	973.26	956.90	941.79	933.41	940.13	966.40	996.65	1007.79	1011.02	1010.19	1001.95	990.44
11	972.84	955.83	939.52	931.53	940.82	967.29	997.94	1007.85	1010.96	1010.03	1001.60	990.00
12	972.31	954.69	937.14	939.62	941.40	968.12	999.13	1007.67	1010.87	1009.86	1001.21	989.56
13	971.82	953.52	934.57	951.47	941.87	969.42	1000.60	1007.50	1010.98	1009.69	1000.82	989.12
14	971.32	952.61	932.58	961.98	942.29	971.20	1002.30	1007.29	1010.94	1009.52	1000.42	988.67
15	970.84	951.55	931.14	966.16	942.63	972.49	1003.52	1007.08	1010.88	1009.34	1000.02	988.22
16	970.31	951.33	929.60	966.34	942.96	973.48	1004.12	1006.83	1010.88	1009.15	999.62	987.70
17	969.79	951.10	928.14	964.91	943.27	974.50	1004.96	1006.25	1010.93	1008.96	999.23	987.29
18	969.63	951.23	926.45	961.45	943.76	975.75	1005.21	1005.67	1010.96	1008.76	998.84	986.88
19	970.28	950.97	925.04	957.15	944.83	976.89	1005.30	1005.06	1010.97	1008.57	998.48	986.36
20	970.88	950.47	925.10	952.32	946.14	978.05	1005.54	1004.44	1010.99	1008.39	998.12	986.01
21	971.09	949.73	926.20	950.26	947.05	979.10	1005.71	1004.39	1010.97	1008.10	997.79	985.56
22	970.81	949.50	927.02	948.11	947.93	980.01	1005.58	1004.43	1010.99	1007.85	997.47	985.08
23	970.08	949.07	927.36	945.87	949.00	980.86	1005.32	1004.46	1011.02	1007.60	997.14	984.59
24	969.27	949.29	927.69	943.62	949.93	981.63	1005.06	1004.54	1011.03	1007.36	996.82	984.09
25	968.61	949.60	927.70	941.25	950.85	982.31	1004.90	1004.90	1011.10	1007.10	996.49	983.58
26	967.83	949.09	927.54	939.84	952.42	983.13	1004.76	1005.65	1011.14	1006.85	996.11	983.05
27	967.20	948.35	927.08	938.11	953.77	983.87	1004.71	1006.45	1011.12	1006.59	995.73	982.54
28	966.45	947.21	926.56	935.32	955.38	984.53	1004.72	1007.01	1011.10	1006.31	995.37	982.02
29	965.52	946.00	926.07	932.44	956.94	985.20	1004.97	1007.45	1011.06	1006.08	994.99	981.38
30	964.80	944.81	925.56	929.50	---	985.88	1005.33	1007.73	1011.02	1005.83	994.62	980.87
31	964.51	---	925.11	927.68	---	986.50	---	1008.04	---	1005.48	994.25	---
MEAN	971.33	953.67	934.61	941.72	942.49	973.06	999.53	1006.50	1010.76	1008.82	999.68	987.84
MAX	977.76	963.74	950.77	966.34	956.94	986.50	1005.71	1008.04	1011.14	1010.95	1005.08	993.88
MIN	964.51	944.81	925.04	925.84	927.15	958.07	987.05	1004.39	1008.41	1005.48	994.25	980.87
(†)	263700	211500	166400	171900	242800	330200	393200	402800	413500	393700	355400	312400
(‡)	-40700	-52200	-45100	-5500	+70900	+87400	+63000	+9600	+10700	-19800	-38300	-43000

CAL YR 1979 MEAN 976.95 MAX 1009.89 MIN 917.47 AC-FT‡ -6400
WTR YR 1980 MEAN 977.58 MAX 1011.14 MIN 925.04 AC-FT‡ +8000

† Contents, in acre-feet, at 2400, on last day of month.
‡ Change in contents, in acre-feet.

14186600 FOSTER LAKE AT FOSTER, OR

LOCATION.--Lat 44°25'00", long 122°40'25", in NW¼NE¼ sec.27, T.13 S., R.1 E., Linn County, Hydrologic Unit 17090006, in Foster Dam on South Santiam River, 0.3 mi (0.5 km) above Wiley Creek, 0.5 mi (0.8 km) north of Foster, and at mile 37.7 (60.7 km).

DRAINAGE AREA.--492 mi² (1,274 km²).

PERIOD OF RECORD.--December 1966 to current year. Prior to October 1971, published as Foster Reservoir at Foster.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by rockfill embankment with an impervious core and ogee spillway completed in 1966 by Corps of Engineers; controlled storage began in November 1966. Total capacity, 60,780 acre-ft (74.9 hm³) and usable capacity 33,210 acre-ft (40.9 hm³) between elevations 609.0 ft (185.52 m), proposed lower limit of operation, and 641.0 ft (195.38 m), top of spillway gates. Reservoir used for reregulation of water released from Green Peter Lake, flood control, power development, pollution abatement, and other purposes. Figures given herein represent total contents.

COOPERATION.--Midnight elevations furnished by Corps of Engineers and reviewed by Geological Survey. Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 60,090 acre-ft (74.1 hm³) Sept. 17, 1968, elevtion, 640.45 ft (195.209 m); minimum, 26,590 acre-ft (32.8 hm³) Nov. 15, 16, 1971, elevation, 607.85 ft (185.273 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 56,900 acre-ft (70.2 hm³) Aug. 19, elevation, 637.85 ft (194.417 m); minimum, 30,220 acre-ft (37.3 hm³) Jan. 15, elevation, 612.05 ft (186.553 m).

Capacity table (elevation, in feet, and total contents, in acre-feet)

607	25,880	630	47,860
610	28,430	635	53,510
615	32,870	640	59,530
620	37,570	641	60,780
625	42,550		

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	637.30	621.07	614.35	613.92	614.95	620.34	621.25	620.65	636.97	637.00	637.12	636.67
2	637.35	620.35	614.34	614.20	613.88	620.38	621.15	620.50	637.23	636.99	637.16	636.80
3	637.45	620.05	613.65	613.94	613.68	620.57	620.96	620.28	636.94	636.98	637.20	636.99
4	637.50	619.60	613.57	614.15	614.02	620.70	620.72	620.01	636.93	637.09	637.26	636.99
5	637.57	619.11	613.51	614.03	614.51	620.74	620.76	619.87	636.98	637.18	637.27	636.98
6	637.65	618.65	613.49	614.45	615.38	620.80	621.45	619.71	637.21	637.23	637.18	636.98
7	637.45	618.11	613.52	614.39	615.77	620.59	621.85	619.46	637.07	636.87	637.08	636.96
8	637.53	617.56	613.59	614.01	616.44	621.04	621.80	620.07	637.05	636.83	637.00	636.95
9	637.65	617.14	613.54	613.49	616.97	620.96	621.94	620.77	637.02	636.81	636.98	636.97
10	637.69	616.78	613.48	613.48	617.61	621.14	621.58	621.60	637.05	636.77	636.95	637.00
11	637.48	616.12	613.49	613.45	618.28	621.49	621.30	622.22	637.01	636.83	636.93	637.04
12	637.56	615.42	613.52	615.32	618.48	621.78	620.99	623.47	637.08	636.88	637.02	637.10
13	637.56	615.19	613.54	614.12	618.44	622.23	621.26	624.56	637.15	636.91	637.12	637.18
14	637.60	614.39	614.07	613.08	618.48	621.89	623.09	625.65	637.05	636.95	637.21	637.25
15	636.74	615.05	614.17	613.49	618.62	621.64	623.19	626.71	637.17	636.97	637.33	637.31
16	635.82	613.67	614.14	613.37	618.71	621.48	622.97	627.72	637.19	636.98	637.43	637.35
17	634.90	613.56	613.92	613.44	618.83	621.53	621.41	629.72	637.11	636.95	637.55	637.07
18	634.27	613.28	613.92	613.58	618.96	621.84	620.90	631.66	637.20	636.95	637.68	637.15
19	632.89	613.26	614.17	613.35	619.09	621.71	621.13	633.57	637.23	636.93	637.70	637.18
20	631.75	613.22	613.82	613.31	619.21	621.53	621.24	635.45	637.32	636.90	637.65	637.28
21	630.38	613.12	614.19	613.46	619.38	621.43	621.34	635.56	637.18	637.17	637.50	637.44
22	628.61	613.46	614.27	613.43	619.46	621.45	620.64	635.72	637.07	637.22	637.35	637.37
23	626.97	613.13	614.05	613.44	619.46	621.56	621.17	635.95	637.14	637.28	637.20	637.26
24	625.74	613.28	613.93	613.47	619.63	621.41	621.31	636.25	637.23	637.31	637.05	637.14
25	625.10	613.35	613.82	613.47	619.77	621.45	620.81	636.80	637.30	637.36	636.86	637.00
26	624.43	613.30	613.85	614.10	619.82	621.50	620.77	636.91	637.07	637.40	636.85	636.92
27	624.26	613.46	614.02	613.22	619.79	621.36	620.62	637.04	637.07	637.43	636.84	636.78
28	623.65	614.33	613.83	613.59	620.28	621.27	620.17	637.11	637.04	637.48	636.80	636.64
29	623.11	614.19	613.85	613.99	620.20	621.31	620.24	636.94	637.05	637.38	636.75	636.96
30	622.63	614.27	614.03	614.98	---	621.22	620.53	637.06	637.02	637.13	636.72	637.02
31	622.14	---	614.14	615.51	---	621.29	---	636.96	---	637.05	636.70	---
MEAN	632.54	615.58	613.86	613.85	617.87	621.28	621.28	628.58	637.10	637.07	637.14	637.06
MAX	637.69	621.07	614.35	615.51	620.28	622.23	623.19	637.11	637.32	637.48	637.70	637.44
MIN	622.14	613.12	613.48	613.08	613.68	620.34	620.17	619.46	636.93	636.77	636.70	636.64
(†)	39660	32210	32090	33340	37760	38820	38080	55820	55900	55930	55520	55900
(‡)	-16780	-7450	-120	+1250	+4420	+1060	-740	+17740	+80	+30	-410	+380

CAL YR 1979 MEAN 626.02 MAX 637.69 MIN 613.12 AC-FT‡ +860
WTR YR 1980 MEAN 626.13 MAX 637.70 MIN 613.08 AC-FT‡ -540

† Contents, in acre-feet, at 2400, on last day of month.
‡ Change in contents, in acre-feet.

14187100 WILEY CREEK AT FOSTER, OR

LOCATION.--Lat 44°23'55", long 122°39'35", in SW¼NW¼ sec.35, T.13 S., R.1 E., Linn County, Hydrologic Unit 17090006, on right bank 1.5 mi (2.4 km) downstream from Jackson Creek, 1.0 mi (1.6 km) southeast of Foster, and at mile 1.4 (2.3 km).

DRAINAGE AREA.--62.3 mi^2 (161.4 km^2).

PERIOD OF RECORD.--October 1973 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 590 ft (179.8 m), from topographic map. Prior to May 2, 1974, at present site at datum 5.00 ft (1.524 m) lower.

REMARKS.--Records good. No regulation or diversion above station.

AVERAGE DISCHARGE.--7 years, 233 ft^3/s (6.599 m^3/s), 50.79 in/yr (1,290 mm/yr), 168,800 acre-ft/yr (208 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,320 ft^3/s (179 m^3/s) Jan. 15, 1974, gage height, 9.28 ft (2.829 m); minimum, 3.1 ft^3/s (0.088 m^3/s) Oct. 19, 1973.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,300 ft^3/s (65.1 m^3/s) and maximum discharge, 3,410 ft^3/s (96.6 m^3/s) Jan. 12, gage height, 8.02 ft (2.444 m); minimum, 4.7 ft^3/s (0.13 m^3/s) Oct. 4-7, 10-12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	214	190	250	142	291	214	123	147	56	23	13
2	5.8	149	911	240	154	249	196	113	158	53	23	30
3	5.4	115	1100	279	205	232	183	102	232	51	24	25
4	5.1	159	1090	275	180	320	180	98	275	58	22	15
5	4.7	257	935	1070	163	325	242	91	232	54	22	13
6	4.7	190	609	839	287	312	423	86	211	51	22	12
7	5.4	140	416	527	308	268	403	80	202	47	21	11
8	5.8	108	305	527	246	239	385	75	178	45	20	12
9	6.2	92	268	723	211	211	610	92	158	44	19	11
10	5.1	79	370	670	183	196	670	125	140	44	14	10
11	4.7	69	275	519	163	299	555	126	128	41	13	9.5
12	5.4	62	247	1960	147	283	473	111	120	40	13	9.7
13	7.0	55	220	2390	132	467	450	102	149	39	13	12
14	11	50	195	1860	123	1090	450	95	140	37	14	12
15	19	47	178	1360	115	749	430	89	125	37	13	11
16	14	60	159	919	107	555	344	82	113	35	13	10
17	13	151	146	827	108	516	303	75	111	35	13	9.5
18	50	359	138	630	126	589	264	69	98	34	17	10
19	257	240	144	491	205	497	246	65	89	34	17	13
20	208	176	176	385	217	467	291	61	83	35	13	29
21	159	142	365	308	202	410	403	60	78	33	12	33
22	84	293	404	260	205	344	316	88	75	30	12	22
23	83	511	375	226	268	338	264	110	78	30	12	15
24	65	770	454	199	235	312	249	110	74	30	11	13
25	193	687	329	178	214	287	220	173	83	29	12	12
26	132	473	264	160	249	299	196	199	105	28	11	11
27	138	319	220	136	239	287	178	246	83	27	11	11
28	126	254	195	115	325	257	163	208	71	26	11	11
29	115	214	178	107	338	246	149	173	66	25	11	11
30	118	203	164	100	---	242	134	145	60	24	11	10
31	441	---	172	95	---	229	---	126	---	24	13	---
TOTAL	2297.1	6638	11192	18625	5797	11406	9584	3498	3862	1176	476	426.7
MEAN	74.1	221	361	601	200	368	319	113	129	37.9	15.4	14.2
MAX	441	770	1100	2390	338	1090	670	246	275	58	24	33
MIN	4.7	47	138	95	107	196	134	60	60	24	11	9.5
CFSM	1.19	3.55	5.80	9.65	3.21	5.91	5.12	1.81	2.07	.61	.25	.23
IN.	1.37	3.96	6.68	11.12	3.46	6.81	5.72	2.09	2.31	.70	.28	.25
AC-FT	4560	13170	22200	36940	11500	22620	19010	6940	7660	2330	944	846

CAL YR 1979 TOTAL 78277.8 MEAN 214 MAX 2410 MIN 4.7 CFSM 3.44 IN 46.74 AC-FT 155300
WTR YR 1980 TOTAL 74977.8 MEAN 205 MAX 2390 MIN 4.7 CFSM 3.29 IN 44.77 AC-FT 148700

14187200 SOUTH SANTIAM RIVER NEAR FOSTER, OR

LOCATION.--Lat 44°24'45", long 122°41'15", in SE¼NE¼ sec.28, T.13 S., R.1 E., Linn County, Hydrologic Unit 17090006, on left bank 0.6 mi (1.0 km) downstream from Wiley Creek and at mile 37.0 (59.5 km).

DRAINAGE AREA.--557 mi² (1,443 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1973 to current year. Records for October 1966 to July 1973 (published as South Santiam River at Foster, station 14186700) at site 0.5 mi (0.8 km) upstream not equivalent owing to inflow between sites.

GAGE.--Water-stage recorder. Altitude of gage is 560 ft (171 m), from topographic map.

REMARKS.--Water-dischage records excellent. Flow regulated since October 1966 by Green Peter Lake (see station 14186100) and since December 1966 by Foster Lake (see station 14186600). No diversion above station.

AVERAGE DISCHARGE.--7 years, 2,900 ft³/s (82.13 m³/s), 2,101,000 acre-ft/yr (2.59 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,900 ft³/s (479 m³/s) Jan. 15, 1974; maximum gage height, 16.16 ft (4.926 m) Dec. 24, 1977; minimum discharge, 425 ft³/s (12.0 m³/s) July 26, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,800 ft³/s (419 m³/s) Jan. 12, gage height, 15.65 ft (4.770 m); minimum, 473 ft³/s (13.4 m³/s) Sept. 18; minimum daily, 793 ft³/s (22.5 m³/s) July 26-29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	882	3550	3610	2270	2780	1770	1090	1040	1020	947	976	864
2	882	3120	6210	2330	2140	1630	1070	976	1040	909	900	873
3	882	2800	8230	2750	1790	1470	1060	957	1790	900	909	873
4	873	3110	9620	2900	1500	1760	1050	947	1990	919	909	864
5	873	3790	8760	6160	1290	1880	1110	938	1650	909	909	864
6	873	3480	7090	4910	1570	1850	1290	919	1420	909	909	855
7	873	2880	6370	3950	2010	1800	1370	909	1950	909	909	855
8	873	2730	5900	3930	1570	1190	1610	900	1760	846	891	855
9	873	2620	5750	5500	1420	1340	2510	909	1680	837	873	909
10	873	2530	6080	6640	1210	1150	2920	947	1570	828	864	900
11	882	2610	5620	6160	1090	1160	2830	947	1540	828	873	900
12	873	2640	5550	11600	1210	1150	2610	938	1440	819	877	900
13	928	2390	5400	13600	1270	1500	2450	928	1410	819	855	891
14	938	2230	4450	12600	1200	4010	1910	919	1580	810	864	900
15	1440	1710	3690	9340	1090	2830	3610	909	1410	810	864	891
16	1450	1880	3670	10100	1090	2070	3790	909	1270	819	864	996
17	1430	2230	3690	11200	1090	1810	3890	900	1170	819	864	996
18	1510	2980	3710	11800	1150	1970	3890	882	1030	810	864	900
19	2730	2500	3480	11700	1560	2000	3670	882	996	802	873	1110
20	2270	2350	2540	11300	1700	1960	3910	873	986	802	864	1130
21	2240	2420	2720	6160	1610	1790	4130	873	1060	802	864	1140
22	2500	2750	3120	5850	1550	1500	4150	909	957	802	864	1130
23	3090	4850	3070	5620	1760	1420	3290	938	882	815	864	1130
24	2780	7180	3070	5450	1560	1420	3500	957	855	802	864	1110
25	3230	5800	2850	5430	1490	1260	3350	1020	1060	815	864	1110
26	3110	4960	2560	3710	1750	1290	2920	1370	1310	793	864	1100
27	2850	3990	2540	4200	1770	1390	2730	1740	1160	793	864	1100
28	2930	3670	2560	4870	1790	1270	2780	1490	1060	793	855	1100
29	2930	3610	2240	4760	2100	1180	1790	1310	976	793	855	1040
30	2970	3610	2210	4490	---	1240	1180	1140	967	864	864	986
31	3810	---	2200	3360	---	1110	---	996	---	976	864	---
TOTAL	55648	96970	138560	204640	45110	51170	77460	31272	38989	26099	27197	29272
MEAN	1795	3232	4470	6601	1556	1651	2582	1009	1300	842	877	976
MAX	3810	7180	9620	13600	2780	4010	4150	1740	1990	976	976	1140
MIN	873	1710	2200	2270	1090	1110	1050	873	855	793	855	855
AC-FT	110400	192300	274800	405900	89480	101500	153600	62030	77330	51770	53950	58060

CAL YR 1979 TOTAL 868122 MEAN 2378 MAX 12000 MIN 580 AC-FT 1722000
WTR YR 1980 TOTAL 822387 MEAN 2247 MAX 13600 MIN 793 AC-FT 1631000

14187200 SOUTH SANTIAM RIVER NEAR FOSTER, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: July 1973 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 15.5°C July 23-25, 1975, June 1, 4-7, 27, 1978; minimum recorded, 2.5°C Dec. 30, 31, 1978, Feb. 1, 1980.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 14.5°C several days in July; minimum, 2.5°C Feb. 1.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	11.5	10.0	9.0	8.0	8.0	7.0	7.0	6.5	3.5	2.5	7.0	6.0
2	11.0	10.0	9.0	8.5	8.0	7.5	6.5	5.5	4.5	3.5	8.0	6.5
3	10.5	9.5	8.5	8.0	8.5	8.0	6.5	6.0	5.0	4.0	7.5	6.5
4	10.5	9.5	8.5	8.5	8.0	8.0	6.5	6.0	4.5	3.5	8.0	7.0
5	10.5	9.5	9.0	8.5	7.5	7.0	6.5	6.0	5.0	4.0	8.0	7.0
6	10.5	9.5	9.0	8.0	7.5	7.0	5.5	5.0	5.5	5.0	7.5	6.5
7	10.5	10.0	9.0	8.0	7.5	7.0	5.0	4.5	5.0	4.0	8.0	6.5
8	10.5	10.0	8.5	7.5	7.5	7.0	5.5	4.5	4.5	4.0	8.0	6.5
9	11.0	9.5	8.5	8.0	7.5	7.0	5.0	4.5	5.0	3.5	8.0	5.5
10	10.5	9.5	8.0	7.5	7.5	6.5	4.5	4.5	5.0	4.0	7.5	6.0
11	10.5	9.5	8.0	8.0	6.5	6.0	5.0	4.5	4.5	3.5	7.0	5.5
12	10.5	9.5	8.0	7.5	7.0	6.5	6.0	5.0	4.5	3.0	6.5	5.0
13	10.5	9.5	8.0	7.5	7.0	6.5	6.5	6.0	4.5	3.5	6.5	5.5
14	10.5	10.0	8.0	7.5	7.5	7.0	6.5	6.0	5.0	4.0	6.0	5.5
15	11.0	10.5	8.0	7.5	7.5	7.0	6.0	5.5	5.0	4.0	6.0	5.0
16	11.0	10.0	8.5	8.0	7.0	6.5	6.5	6.0	4.5	4.0	7.0	5.0
17	11.0	10.0	8.5	8.0	7.5	7.0	6.0	5.0	5.0	4.0	7.0	5.5
18	11.0	10.0	8.0	7.0	7.5	7.5	5.0	4.5	6.0	5.0	7.0	5.5
19	11.0	10.0	8.5	7.5	7.5	7.5	5.0	4.5	6.0	5.0	7.0	5.5
20	11.0	9.5	7.5	7.0	7.5	7.0	5.0	4.5	6.0	5.5	7.0	6.0
21	11.0	10.0	7.0	6.5	7.5	6.5	5.0	4.5	5.5	4.5	6.5	5.5
22	11.0	10.0	8.0	7.0	6.5	6.0	5.0	4.5	6.0	4.5	7.5	6.0
23	11.0	10.5	8.0	7.0	6.5	5.5	5.0	4.5	6.5	5.0	7.0	5.5
24	11.5	10.5	8.0	7.5	6.5	6.0	5.0	4.5	7.5	5.5	7.5	5.0
25	10.5	9.5	7.5	7.0	6.5	6.0	5.0	4.5	7.0	6.0	8.0	5.0
26	10.5	9.5	8.0	7.0	6.0	5.5	4.5	4.0	7.5	7.0	7.0	5.5
27	10.5	9.5	7.0	6.0	5.5	5.0	4.0	3.5	7.5	7.0	7.5	5.5
28	9.5	9.5	7.0	6.5	5.5	5.0	3.5	3.5	8.0	6.5	8.0	5.0
29	10.0	9.0	7.0	6.5	6.0	5.5	3.5	3.0	7.5	5.5	7.0	6.0
30	9.5	9.0	7.0	7.0	6.0	5.5	3.0	3.0	---	---	7.5	5.5
31	9.5	8.5	---	---	6.5	5.5	3.0	3.0	---	---	6.5	5.5
MONTH	11.5	8.5	9.0	6.0	8.5	5.0	7.0	3.0	8.0	2.5	8.0	5.0

14187200 SOUTH SANTIAM RIVER NEAR FOSTER, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.5	5.5	11.0	9.0	11.0	9.5	13.5	11.0	13.5	12.0	12.0	10.5
2	8.0	5.0	10.0	9.0	10.0	9.0	13.0	11.5	13.5	11.5	12.5	11.0
3	7.5	5.5	11.0	8.5	10.5	9.0	12.0	11.0	13.5	11.5	12.0	10.5
4	8.0	6.0	11.5	9.5	12.0	9.5	12.0	11.0	13.0	11.5	12.0	10.5
5	8.5	6.5	11.0	10.0	11.0	9.0	12.0	11.0	13.0	11.5	12.0	10.5
6	6.5	5.0	11.0	9.5	10.5	9.5	13.5	11.0	13.0	11.5	11.5	10.5
7	7.0	4.5	11.5	9.5	11.5	10.0	14.0	11.0	13.0	11.5	11.5	11.0
8	7.5	6.0	10.5	10.0	11.5	10.5	13.5	11.5	13.0	11.5	11.5	10.5
9	7.0	6.5	11.0	9.5	11.5	10.5	13.0	12.0	13.0	11.5	12.0	10.5
10	8.0	6.0	9.5	9.0	11.5	10.0	14.0	11.5	13.0	11.5	11.5	10.5
11	9.0	5.5	10.0	9.0	11.0	10.0	14.0	11.5	13.0	11.5	11.5	11.0
12	10.0	6.5	10.5	9.5	10.5	10.0	14.0	12.0	12.5	11.0	11.5	10.5
13	10.0	7.0	9.5	9.0	10.5	10.0	14.0	11.5	12.5	11.0	11.0	10.5
14	9.0	7.5	10.5	8.5	10.5	10.0	14.0	12.0	12.5	11.0	11.5	10.5
15	9.0	6.5	10.0	8.5	12.5	10.0	14.5	12.0	12.5	11.0	11.5	10.5
16	9.5	7.0	11.0	8.5	11.5	10.0	14.5	11.5	12.5	11.5	11.0	10.5
17	8.5	7.5	11.5	9.5	12.5	10.0	14.0	12.0	12.0	11.0	11.5	10.5
18	9.0	8.0	11.0	9.5	13.0	10.5	14.0	11.5	12.0	11.0	11.5	10.5
19	9.5	8.0	11.0	9.0	13.0	10.5	14.0	12.0	12.5	11.0	11.5	10.5
20	8.5	7.5	11.5	9.0	12.5	10.5	14.5	12.0	12.5	10.5	11.5	10.5
21	8.0	7.0	10.0	9.5	12.5	10.5	14.5	12.0	12.0	10.5	11.5	10.5
22	8.0	7.0	9.5	9.0	12.5	10.5	14.5	12.0	12.0	11.0	11.5	10.0
23	8.0	7.0	10.5	8.0	12.0	11.0	14.0	12.0	12.0	10.5	11.0	10.0
24	8.5	7.5	9.5	8.5	12.5	11.0	14.0	11.5	12.0	11.0	11.0	10.5
25	10.0	7.0	10.0	8.5	12.0	10.5	14.0	11.5	12.0	10.5	11.5	10.5
26	9.5	7.5	9.0	8.5	12.0	10.5	14.5	11.5	11.5	10.5	11.5	10.5
27	10.0	8.5	10.0	8.5	13.0	10.0	14.0	11.5	11.5	11.0	11.0	10.5
28	10.0	7.5	11.5	9.0	12.5	10.5	14.5	12.0	12.0	11.0	11.0	10.5
29	9.5	8.0	10.5	9.0	13.0	10.5	14.0	12.0	12.0	10.5	11.0	10.5
30	10.5	7.5	11.0	9.5	13.5	10.5	14.0	11.5	11.5	11.0	11.0	10.5
31	---	---	11.5	9.5	---	---	14.0	11.5	12.0	11.0	---	---
MONTH	10.5	4.5	11.5	8.0	13.5	9.0	14.5	11.0	13.5	10.5	12.5	10.0

14187500 SOUTH SANTIAM RIVER AT WATERLOO, OR

LOCATION.--Lat 44°29'55", long 122°49'20", in SW¼NW¼ sec.28, T.12 S., R.1 W., Linn County, Hydrologic Unit 17090006, on left bank 0.1 mi (0.2 km) downstream from highway bridge at Waterloo, 2.1 mi (3.4 km) upstream from Hamilton Creek, and at mile 23.3 (37.5 km).

DRAINAGE AREA.--640 mi² (1,658 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1905 to March 1907, October 1910 to December 1911 (gage heights only January to December 1911), July 1923 to current year. Monthly discharge only for some periods, published in WSP 1318. Published as South Fork of Santiam River at Waterloo 1905-07, 1910-11.

REVISED RECORDS.--WSP 1248: 1907, 1924-30, 1932.

GAGE.--Water-stage recorder. Datum of gage is 370.39 ft (112.895 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 31, 1911, nonrecording gage at site 0.5 mi (0.8 km) downstream at datum about 5.0 ft (1.52 m) lower. July 1, 1923, to Nov. 12, 1934, nonrecording gage, at present site and datum.

REMARKS.--Water-discharge records excellent. Flow regulated since October 1966 by Green Peter Lake (see station 14186100) and since December 1966 by Foster Lake (see station 14186600). No diversion above station.

AVERAGE DISCHARGE.--58 years (water years 1906, 1924-80), 2,928 ft³/s (82.92 m³/s), 2,121,000 acre-ft/yr (2.62 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 95,200 ft³/s (2,696 m³/s) Dec. 22, 1964, gage height, 24.50 ft (7.468 m); minimum, 61 ft³/s (1.73 m³/s) Oct. 12, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15,900 ft³/s (450 m³/s) Jan. 12, gage height, 9.25 ft (2.819 m); minimum, 499 ft³/s (14.1 m³/s) Sept. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	860	3880	3900	2530	2980	2080	1200	1070	1030	920	940	820
2	860	3450	6690	2590	2750	1880	1160	1030	1050	870	850	850
3	860	3080	9000	3040	1900	1680	1140	984	1790	870	850	840
4	850	3230	10100	3200	1760	1970	1140	962	2110	890	850	820
5	850	4180	9500	6520	1470	2180	1200	951	1810	890	850	820
6	850	3840	7570	5800	1760	2120	1600	940	1410	870	850	810
7	850	3230	6790	4420	2350	2060	1680	910	2000	870	850	810
8	860	2990	6320	4480	1850	1460	1840	900	1820	840	840	810
9	850	2860	6060	5840	1640	1450	2740	930	1750	820	810	850
10	860	2740	6520	7310	1400	1340	3280	951	1600	800	800	860
11	860	2790	5990	6640	1260	1390	3180	951	1550	780	800	860
12	860	2910	5840	11600	1280	1360	2940	940	1470	770	800	860
13	910	2580	5700	14500	1390	1710	2740	930	1420	770	810	860
14	940	2450	4950	13400	1350	4620	2060	920	1620	760	800	860
15	1360	1880	3980	10200	1170	3690	3740	910	1460	760	800	850
16	1510	2030	3920	10400	1170	2660	4000	900	1320	760	800	930
17	1480	2430	3940	11300	1170	2260	4080	880	1170	760	810	962
18	1570	3430	3960	11800	1240	2420	4080	870	1040	750	810	870
19	2810	3010	3800	11500	1690	2420	3860	860	962	750	820	1060
20	2620	2660	2890	11200	1930	2350	4160	850	951	750	800	1120
21	2530	2700	3090	6760	1880	2200	4360	860	1020	740	800	1130
22	2510	2990	3540	6130	1780	1840	4580	890	962	740	800	1120
23	3430	5000	3540	5870	2140	1610	3550	930	850	740	810	1110
24	3010	7650	3520	5700	1880	1680	3670	940	830	740	800	1110
25	3450	6490	3250	5630	1720	1460	3550	1030	962	740	810	1080
26	3410	5530	2920	4120	2000	1450	3300	1330	1330	730	810	1080
27	3110	4480	2820	4300	2030	1620	2820	1820	1180	730	810	1080
28	3200	4040	2840	5000	2110	1440	2980	1600	1070	730	810	1070
29	3200	3940	2540	4980	2380	1280	2060	1380	951	721	800	1040
30	3210	3920	2450	4760	---	1400	1360	1210	940	770	810	962
31	4120	---	2450	3650	---	1230	---	1010	---	890	810	---
TOTAL	58650	106390	150380	215170	51430	60310	84050	31639	39428	24521	25410	28304
MEAN	1892	3546	4851	6941	1773	1945	2802	1021	1314	791	820	943
MAX	4120	7650	10100	14500	2980	4620	4580	1820	2110	920	940	1130
MIN	850	1880	2450	2530	1170	1230	1140	850	830	721	800	810
AC-FT	116300	211000	298300	426800	102000	119600	166700	62760	78210	48640	50400	56140

CAL YR 1979 TOTAL 935911 MEAN 2564 MAX 12500 MIN 539 AC-FT 1856000
WTR YR 1980 TOTAL 875682 MEAN 2393 MAX 14500 MIN 721 AC-FT 1737000

14187500 SOUTH SANTIAM RIVER AT WATERLOO, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1963 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 26.0°C Aug. 4, 1966; minimum, 1.5°C Dec. 18-20, 1965, Feb. 1, 2, 1979.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 18.5°C July 31; minimum, 3.5°C Jan. 28-31.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	13.5	10.5	10.0	8.5	9.0	8.0	7.5	7.0	5.0	4.0	8.0	7.0
2	13.5	10.5	10.0	9.0	9.0	9.0	7.5	7.0	5.5	4.5	9.5	7.5
3	13.0	10.5	9.5	9.0	9.5	9.0	7.0	7.0	6.0	5.0	8.5	7.5
4	13.0	11.0	9.5	9.0	9.5	9.0	7.0	6.5	5.5	4.5	9.0	8.0
5	13.0	10.5	10.0	9.0	9.0	8.5	7.0	6.5	5.5	5.0	9.0	8.0
6	12.5	10.5	10.0	9.0	9.0	8.5	6.5	6.0	7.0	5.5	9.0	7.5
7	12.0	11.0	10.0	8.5	8.5	8.0	6.0	6.0	6.5	5.0	9.0	7.0
8	12.5	10.5	9.5	8.5	8.5	8.5	6.5	5.5	6.0	5.0	9.0	7.5
9	12.5	10.5	9.5	8.5	9.0	8.5	6.0	5.5	6.0	4.5	9.5	6.5
10	12.5	10.5	9.0	8.0	8.5	7.5	5.5	5.5	6.5	5.0	9.0	7.5
11	12.5	10.0	9.0	8.5	8.0	7.5	6.0	5.5	6.0	4.5	8.0	7.0
12	12.5	10.0	9.0	8.5	8.5	7.5	6.5	6.0	6.0	4.5	7.5	6.5
13	12.5	10.5	8.5	8.5	8.5	7.5	7.0	6.5	6.5	4.5	7.5	7.0
14	12.0	11.0	8.5	8.0	8.5	8.0	7.0	6.5	6.0	4.5	7.5	6.5
15	13.0	10.5	9.0	8.0	8.5	8.0	7.0	6.5	6.0	5.0	7.5	6.0
16	12.5	11.0	9.0	8.5	8.0	7.5	7.0	6.5	5.5	5.0	8.0	6.0
17	12.0	10.5	10.0	9.0	8.5	7.5	6.5	6.0	6.0	5.0	8.0	7.0
18	11.5	10.5	9.0	8.5	8.5	8.0	6.0	5.5	7.0	6.0	8.0	7.0
19	11.5	10.5	9.5	9.0	8.5	8.0	6.0	5.5	7.0	6.0	8.5	7.0
20	11.5	10.5	9.0	8.0	8.5	8.0	6.0	5.5	7.0	6.0	8.0	7.0
21	12.0	10.0	8.5	7.5	8.5	7.5	6.0	5.5	6.5	6.0	8.0	7.0
22	11.5	11.0	9.0	8.0	8.0	7.0	6.0	5.5	7.0	5.5	8.5	7.0
23	12.5	11.0	9.0	8.5	7.5	7.0	6.0	5.5	7.0	6.0	8.5	7.0
24	12.5	11.0	9.5	8.5	7.5	7.0	6.0	5.5	8.5	6.5	9.5	6.5
25	11.5	10.0	9.0	8.5	7.5	7.0	6.0	5.5	8.0	7.0	9.5	6.5
26	11.5	10.0	9.0	8.5	7.5	6.5	5.5	4.5	8.5	7.5	8.5	7.0
27	11.0	10.0	8.5	7.5	7.0	6.5	4.5	4.0	8.0	7.5	9.0	6.5
28	11.0	9.5	8.5	7.5	6.5	6.0	4.5	3.5	8.5	7.5	9.5	6.5
29	10.5	9.5	8.5	7.5	7.0	6.5	4.0	3.5	8.5	6.5	9.0	7.5
30	11.0	9.5	8.0	8.0	7.0	6.5	4.0	3.5	---	---	9.0	6.5
31	10.5	9.0	---	---	7.5	7.0	4.0	3.5	---	---	8.0	7.0
MONTH	13.5	9.0	10.0	7.5	9.5	6.0	7.5	3.5	8.5	4.0	9.5	6.0

14187500 SOUTH SANTIAM RIVER AT WATERLOO, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.5	6.5	14.0	9.0	13.0	10.5	16.5	12.5	17.0	13.0	15.0	11.5
2	10.0	6.5	12.0	9.5	12.0	10.0	15.5	13.0	16.5	13.5	15.0	12.5
3	9.0	7.0	14.0	9.0	13.0	9.5	14.5	12.0	16.5	13.5	14.5	11.5
4	9.0	7.5	15.0	10.5	14.0	10.0	13.0	12.0	16.5	13.0	15.0	11.5
5	10.0	8.0	13.0	10.5	12.0	10.5	14.0	12.0	16.0	13.0	15.0	12.0
6	8.5	7.0	13.5	10.0	12.5	10.5	16.5	12.0	16.5	12.5	14.5	12.0
7	8.0	6.5	14.5	10.0	13.5	10.5	17.0	13.0	17.0	13.0	14.0	12.5
8	9.0	7.5	14.0	10.5	13.5	11.0	16.0	13.0	16.5	13.0	14.5	11.0
9	9.5	7.5	12.5	10.5	12.5	11.0	14.5	13.5	17.0	13.5	15.5	12.0
10	9.5	7.0	12.0	10.0	13.5	10.5	16.5	13.0	16.5	13.5	15.0	12.5
11	10.5	7.5	11.0	10.0	13.0	11.0	16.0	13.5	16.5	13.5	15.0	11.5
12	11.5	8.0	12.0	10.5	12.0	10.5	16.5	14.0	15.5	13.0	14.0	11.5
13	11.5	8.0	12.0	10.5	11.5	10.5	17.0	13.5	15.0	12.5	12.5	11.5
14	10.5	8.0	11.5	10.0	11.5	10.5	17.0	14.5	16.0	13.0	14.0	10.5
15	11.0	8.0	12.0	10.0	14.5	10.5	17.5	14.0	15.5	12.5	14.0	11.0
16	11.0	8.0	14.0	9.0	13.5	11.0	17.5	14.5	16.5	13.5	14.5	11.0
17	10.5	8.0	15.0	10.0	15.0	11.0	16.5	14.0	15.5	13.0	14.0	11.0
18	11.5	8.0	14.5	10.5	15.5	11.0	17.0	14.0	15.0	13.0	13.5	11.5
19	10.5	8.5	13.5	10.5	16.0	11.5	17.5	14.0	16.0	12.0	12.0	11.5
20	9.5	8.5	14.0	10.5	15.0	12.0	17.5	14.5	15.5	12.0	12.5	11.0
21	8.5	8.0	13.5	10.5	14.5	12.0	18.5	15.0	15.5	12.0	13.0	11.0
22	9.5	8.5	11.5	9.5	14.5	11.5	17.5	15.5	15.5	12.5	13.0	10.0
23	10.0	7.5	11.5	9.0	14.5	12.0	17.5	14.5	16.0	12.5	13.5	10.5
24	9.5	7.5	11.0	10.0	13.5	11.5	17.0	14.0	15.0	12.5	13.5	10.5
25	11.5	8.0	11.5	9.5	13.5	12.0	17.5	14.5	15.5	12.0	13.5	10.5
26	11.5	7.5	10.5	9.0	13.5	11.0	17.5	14.5	14.5	12.0	13.5	11.0
27	12.5	8.5	11.5	9.5	16.0	11.0	18.0	15.0	14.0	12.5	13.0	11.0
28	11.0	8.0	13.5	9.5	15.5	11.5	18.0	15.0	15.0	11.5	13.0	11.0
29	12.0	7.5	12.5	9.5	16.0	12.0	17.0	14.5	14.5	11.5	13.5	10.0
30	13.0	8.0	12.5	10.0	16.5	12.0	17.0	14.0	13.5	12.0	14.0	11.0
31	---	---	13.5	10.5	---	---	17.0	14.0	14.0	11.5	---	---
MONTH	13.0	6.5	15.0	9.0	16.5	9.5	18.5	12.0	17.0	11.5	15.5	10.0

14188800 THOMAS CREEK NEAR SCIO, OR

LOCATION.--Lat 44°42'42", long 122°45'55", in SE¼SE¼ sec.11, T.10 S., R.1 W., Linn County, Hydrologic Unit 17090006, on left bank 0.3 mi (0.5 km) upstream from bridge on State Highway 226, 1.6 mi (2.6 km) upstream from Mill Creek, 4.2 mi (6.8 km) east of Scio, and at mile 14.6 (23.5 km).

DRAINAGE AREA.--109 mi² (282 km²).

PERIOD OF RECORD.--October 1962 to current year.

REVISED RECORDS.--WRD Oreg. 1971: 1965(P), 1966(P), 1969(P).

GAGE.--Water-stage recorder. Datum of gage is 380.84 ft (116.080 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. No regulation. Several small diversions for irrigation above station.

AVERAGE DISCHARGE.--18 years, 496 ft³/s (14.05 m³/s), 61.80 in/yr (1,570 mm/yr), 359,400 acre-ft/yr (443 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,400 ft³/s (776 m³/s) Dec. 22, 1964, gage height, 18.44 ft (5.621 m), from rating curve extended above 7,200 ft³/s (204 m³/s), on basis of slope-area measurement of peak flow; maximum gage height, 19.58 ft (5.968 m) Jan. 21, 1972, backwater from debris; minimum discharge, 7.8 ft³/s (0.22 m³/s) Aug. 20, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,500 ft³/s (99.1 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 4	1130	3,540	100	7.86	2.396	Jan. 12	1900	*6,150	174	*9.97	3.039

Minimum, 16 ft³/s (0.45 m³/s) Aug. 26, Sept. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	383	414	585	362	538	355	257	224	96	29	29
2	20	311	2060	555	555	470	330	236	251	91	30	68
3	19	266	1720	720	845	438	311	221	390	91	36	52
4	18	430	2320	650	605	670	314	203	414	117	31	34
5	19	755	1650	1820	506	660	470	190	337	108	30	28
6	19	522	1090	1230	795	615	775	182	299	96	30	25
7	19	390	820	880	775	530	745	170	293	84	29	25
8	20	317	655	1010	625	490	775	162	266	78	29	25
9	20	269	600	1520	526	438	1340	195	236	75	28	22
10	19	233	730	1230	458	414	1230	203	212	74	29	20
11	17	203	560	1020	402	600	964	203	192	68	26	19
12	17	182	510	3900	362	570	830	182	180	67	26	21
13	17	165	458	4320	330	805	810	167	251	65	26	30
14	31	152	418	4090	308	1730	850	162	260	60	25	29
15	51	140	410	2470	287	1200	775	157	230	59	26	23
16	34	197	372	1770	269	910	635	150	209	56	26	21
17	27	293	362	1470	272	886	575	138	203	54	26	20
18	80	590	390	1110	299	1020	506	130	177	51	27	22
19	546	490	430	880	474	840	494	125	162	50	28	30
20	780	386	490	735	550	790	580	119	152	51	25	101
21	514	327	946	620	470	695	755	121	146	46	21	98
22	311	590	892	538	450	605	605	170	138	41	21	54
23	314	964	815	482	685	555	514	172	132	41	20	42
24	245	1200	825	438	570	502	494	162	134	39	22	36
25	418	1090	665	398	522	470	442	242	142	38	21	33
26	542	850	550	362	600	494	394	414	148	37	19	29
27	550	650	486	314	550	458	362	376	128	38	20	27
28	486	526	430	284	670	406	334	305	117	35	23	28
29	376	454	390	263	630	402	308	254	108	31	23	28
30	362	446	372	260	---	406	278	224	101	30	21	26
31	522	---	406	254	---	383	---	197	---	32	29	---
TOTAL	6434	13771	23236	36178	14752	19990	18150	6189	6232	1899	802	1045
MEAN	208	459	750	1167	509	645	605	200	208	61.3	25.9	34.8
MAX	780	1200	2320	4320	845	1730	1340	414	414	117	36	101
MIN	17	140	362	254	269	383	278	119	101	30	19	19
CFSM	1.91	4.21	6.88	10.7	4.67	5.92	5.55	1.84	1.91	.56	.24	.32
IN.	2.20	4.70	7.93	12.35	5.03	6.82	6.19	2.11	2.13	.65	.27	.36
AC-FT	12760	27310	46090	71760	29260	39650	36000	12280	12360	3770	1590	2070

CAL YR 1979 TOTAL 154786 MEAN 424 MAX 5460 MIN 13 CFSM 3.89 IN 52.83 AC-FT 307000
WTR YR 1980 TOTAL 148678 MEAN 406 MAX 4320 MIN 17 CFSM 3.73 IN 50.74 AC-FT 294900

14189000 SANTIAM RIVER AT JEFFERSON, OR

LOCATION.--Lat 44°42'55", long 122°00'40", in SE¼ sec.11, T.10 S., R.3 W., Marion County, Hydrologic Unit 17090005, on right bank 350 ft (107 m) upstream from Southern Pacific railroad bridge at Jefferson, 2.1 mi (3.4 km) downstream from confluence of North and South Santiam Rivers, and at mile 9.62 (15.5 km).

DRAINAGE AREA.--1,790 mi² (4,640 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1905 to June 1906 (gage heights and discharge measurements only), October 1907 to September 1916, October 1939 to current year. Gage-height records collected at same site since 1907 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 904: Drainage area. WSP 1094: 1908, 1910, 1912, 1943. WSP 1248: 1911, 1915-16(M). WSP 1935: 1909.

GAGE.--Water-stage recorder. Datum of gage is 199.63 ft (60.847 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 22, 1940, nonrecording gages at sites within 350 ft (107 m) downstream at datum 3.00 ft (0.914 m) higher.

REMARKS.--Water-discharge records excellent. Flow regulated since 1953 by Detroit Lake (see station 14180500), since 1966 by Green Peter Lake (see station 14186100) and by Foster Lake (see station 14186600). Salem Canal diverts from North Santiam River at Stayton for irrigation and power; most of this water reaches Willamette River by way of Mill Creek at Salem. Stayton Canal diverts from North Santiam River at Stayton for irrigation of lands near West Stayton; some return flow reaches North Santiam River above station. Albany power canal diverts from South Santiam River at Lebanon; return flow reaches Willamette River at Albany.

AVERAGE DISCHARGE.--50 years (water years 1908-16, 1940-80), 7,783 ft³/s (220.4 m³/s), 5,639,000 acre-ft/yr (6.95 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 197,000 ft³/s (5,580 m³/s) Dec. 22, 1964, gage height, 24.22 ft (7.382 m); minimum observed, 260 ft³/s (7.36 m³/s) Aug. 15-22, Aug. 24 to Sept. 2, 1940.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood stage of 25.0 ft (7.62 m) was reached in December 1861, and 23.4 ft (7.13 m) in February 1890 (information from Corps of Engineers). On Nov. 21, 1921, the stage reached 19.5 ft (5.94 m) at gage on railroad bridge 350 ft (107 m) downstream, corresponding gage height at present site and datum, 24.4 ft (7.44 m), from curve of relation, discharge, 202,000 ft³/s (5,720 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 44,300 ft³/s (1,250 m³/s) Jan. 13, gage height, 14.39 ft (4.386 m); minimum daily, 1,350 ft³/s (38.2 m³/s) July 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3020	8500	8930	6180	7520	5950	3930	3800	3380	2420	1520	2000
2	3030	7520	17500	6250	8170	5210	3710	3480	3660	2210	1520	2330
3	2990	6910	23200	7680	7190	4760	3560	3120	4740	2380	1520	2590
4	2940	7030	26700	7840	6930	5950	3530	2970	5190	2050	1550	2440
5	2940	9680	25300	15800	5430	6560	3880	2910	4930	2220	1460	2380
6	2960	9010	19800	15900	5050	6560	5790	2800	4160	2040	1530	2360
7	3020	7630	17100	11200	8000	5920	6440	2690	4530	1960	1530	2420
8	3020	6540	15500	11800	6810	5190	5850	2630	4400	1870	1470	2390
9	3020	5790	13000	14700	5760	4590	8280	2720	4070	1770	1500	2430
10	2970	5520	13200	18600	5030	4440	9680	3060	3760	1790	1440	2360
11	2990	5360	12000	16700	4470	5540	8560	3350	3580	1730	1420	2560
12	2830	5410	11300	27100	4110	5360	7650	3260	3510	1810	1490	2800
13	2400	5090	11000	40300	3990	6040	7390	3200	3590	1800	1450	2830
14	2510	4910	10400	36400	3810	12500	7110	3050	4230	1820	1450	2870
15	2740	4420	9120	31400	3590	11500	8500	2970	3930	1700	1490	2870
16	3020	4510	9090	25600	3450	8870	8390	2840	3710	1650	1660	3000
17	2940	5340	8930	27800	3410	7420	9040	2800	3410	1590	1720	3140
18	3060	7950	9260	26800	3590	8420	9170	2740	3200	1560	1760	3150
19	5650	7840	8790	26000	4470	7680	8980	2590	2990	1550	1710	3210
20	8330	6590	6980	25000	5390	7130	9850	2560	2840	1580	1820	3590
21	8110	6060	8450	20900	5260	6860	10800	2580	2840	1590	1830	3880
22	6320	6610	9650	15600	4810	5990	9990	2670	2830	1500	1810	3680
23	7260	11000	9310	14100	5950	5360	8610	2770	2550	1440	1840	3500
24	6780	14900	9620	13800	5520	5110	8140	2790	2350	1440	1830	3380
25	7290	15900	8170	13600	5030	4760	8280	3560	2590	1490	1790	3320
26	8310	13500	7310	10700	5790	4600	7290	4850	2770	1410	1800	3320
27	8090	11100	6810	8790	5990	4850	6510	5650	2970	1440	1870	3290
28	8170	9760	6590	11600	6390	4420	6810	5010	2700	1520	1860	3330
29	7730	9090	6110	11900	6710	4140	6200	4470	2510	1410	1870	3330
30	7420	8980	5700	11700	---	4270	4470	4110	2460	1350	1930	3210
31	8790	---	5810	9060	---	4040	---	3540	---	1450	1980	---
TOTAL	150650	238450	360630	540800	157620	189990	216390	101540	104380	53540	51420	87960
MEAN	4860	7948	11630	17450	5435	6129	7213	3275	3479	1727	1659	2932
MAX	8790	15900	26700	40300	8170	12500	10800	5650	5190	2420	1980	3880
MIN	2400	4420	5700	6180	3410	4040	3530	2560	2350	1350	1420	2000
AC-FT	298800	473000	715300	1073000	312600	376800	429200	201400	207000	106200	102000	174500

CAL YR 1979 TOTAL 2324030 MEAN 6367 MAX 32400 MIN 1180 AC-FT 4610000
WTR YR 1980 TOTAL 2253370 MEAN 6157 MAX 40300 MIN 1350 AC-FT 4470000

14189000 SANTIAM RIVER AT JEFFERSON, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1963 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 23.5°C Aug. 8, 1971, Aug. 1, 1973; minimum, 0.0°C Jan. 1, 1979.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 22.5°C July 21; minimum recorded, 1.5°C Jan. 28-30.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	16.0	14.0	11.5	10.5	8.5	8.0	8.0	7.5	4.5	3.0	7.0	6.5
2	16.0	14.0	12.0	11.5	9.0	8.5	7.5	7.0	5.0	4.0	8.5	7.0
3	16.0	14.0	12.5	12.0	9.0	8.5	7.0	7.0	6.0	4.5	8.0	7.5
4	16.0	14.5	12.5	12.0	9.5	9.0	7.0	6.5	5.5	4.5	8.5	7.5
5	16.0	14.0	12.0	11.0	9.0	8.0	7.0	6.5	5.0	5.0	8.5	7.5
6	15.5	14.5	11.5	11.0	8.0	8.0	6.5	5.5	6.5	5.0	7.5	7.0
7	15.0	14.5	12.0	10.5	8.0	8.0	5.5	5.0	6.0	5.0	8.0	7.0
8	16.0	14.5	11.5	10.5	8.0	7.5	6.0	5.0	5.5	4.5	8.5	7.5
9	16.0	14.0	10.5	10.0	8.5	7.5	6.0	5.5	5.0	4.0	8.0	6.5
10	15.5	14.0	10.5	9.5	8.5	7.5	---	5.0	6.0	4.5	8.0	7.5
11	15.5	14.0	10.0	9.5	7.5	6.5	---	---	5.5	4.0	7.5	6.5
12	15.5	14.0	9.5	9.0	7.5	6.5	---	---	5.0	4.0	6.5	6.0
13	15.0	14.0	9.0	9.0	8.0	7.5	---	---	5.0	4.0	6.5	6.0
14	15.0	15.0	9.5	9.0	8.5	8.0	---	---	5.0	4.0	6.5	6.0
15	16.0	14.5	9.0	8.0	8.5	8.0	---	---	4.5	4.0	6.0	5.5
16	15.0	14.5	10.0	9.5	8.0	7.0	---	---	5.0	4.0	7.0	5.5
17	14.5	13.5	10.5	10.0	8.5	7.0	---	---	5.0	4.5	7.0	7.0
18	14.0	13.0	10.5	9.0	8.5	8.5	---	---	7.0	5.0	7.5	6.5
19	13.0	12.0	9.5	8.5	8.5	8.5	---	---	7.0	6.5	7.5	7.0
20	12.0	11.5	9.0	8.0	8.5	8.5	---	---	7.0	6.5	8.0	7.0
21	13.0	11.0	8.0	7.5	8.5	7.5	---	---	6.5	5.0	7.5	6.5
22	13.0	13.0	9.0	7.5	7.5	7.0	---	---	6.0	5.0	8.0	6.5
23	14.0	13.0	9.0	8.5	7.0	6.5	---	---	6.5	6.0	8.0	7.0
24	14.0	13.0	9.0	8.5	7.5	6.5	---	---	7.5	6.5	9.0	6.5
25	14.0	13.0	9.0	8.0	7.5	7.0	5.0	---	7.5	7.0	9.5	7.0
26	13.0	12.5	8.0	7.5	7.5	7.0	5.0	3.0	8.0	7.0	8.5	7.0
27	13.5	12.5	8.0	7.5	7.0	6.0	3.0	2.0	8.0	8.0	9.0	6.5
28	12.5	12.0	7.5	7.0	6.0	6.0	2.5	1.5	8.5	7.5	9.0	7.0
29	12.0	11.5	8.0	7.5	6.5	6.0	2.5	1.5	7.5	6.5	8.5	7.0
30	12.0	12.0	8.0	8.0	6.5	6.5	2.5	1.5	---	---	8.5	6.5
31	12.0	11.5	---	---	7.5	6.5	3.0	2.5	---	---	8.0	6.5
MONTH	16.0	11.0	12.5	7.0	9.5	6.0	8.0	1.5	8.5	3.0	9.5	5.5

WILLAMETTE RIVER BASIN

14189000 SANTIAM RIVER AT JEFFERSON, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.0	6.0	13.5	10.5	12.5	11.5	18.5	15.0	20.0	16.0	16.0	12.5
2	9.5	6.5	13.0	11.0	11.5	10.0	17.5	15.5	18.5	16.5	16.5	15.0
3	8.5	7.0	14.0	10.0	12.5	9.5	15.5	13.5	19.0	15.0	15.5	13.0
4	9.0	7.5	15.5	12.0	13.5	10.5	13.5	12.5	19.5	15.5	16.0	13.0
5	9.5	8.0	14.0	12.0	13.0	11.5	15.5	12.5	18.0	16.0	16.5	13.5
6	8.0	6.5	13.0	11.0	11.5	11.0	17.5	13.0	19.0	14.5	15.5	14.0
7	7.0	5.5	15.0	10.5	12.5	10.5	20.0	15.0	19.5	15.0	16.0	14.5
8	8.5	7.0	13.0	12.0	14.0	12.0	19.0	16.0	20.0	16.0	15.5	13.5
9	8.5	7.5	12.0	10.5	13.5	12.5	17.0	15.5	20.0	16.5	16.5	14.0
10	9.0	7.0	11.0	9.0	13.5	12.0	18.0	14.0	20.0	16.5	17.0	15.0
11	9.5	7.0	9.5	9.0	14.0	13.0	18.0	15.5	20.0	16.5	16.0	14.5
12	11.5	8.5	11.0	9.5	13.0	11.5	19.0	15.0	18.5	16.0	15.0	13.5
13	11.0	10.0	11.0	9.5	12.0	10.5	19.5	15.5	18.5	15.5	13.5	12.5
14	11.0	9.0	12.0	10.0	11.0	10.5	19.0	16.5	18.5	15.0	14.5	12.0
15	10.5	8.0	11.5	10.0	14.5	10.5	20.0	15.5	17.5	15.0	15.0	12.5
16	11.0	8.5	13.5	9.5	13.5	11.5	20.5	16.5	18.0	15.0	15.5	13.0
17	11.0	9.0	15.0	11.5	15.0	10.5	20.5	16.5	17.0	15.0	15.5	13.0
18	10.5	8.0	14.5	12.5	16.5	13.0	20.5	16.5	16.0	14.5	15.0	13.0
19	10.5	9.0	15.0	12.0	17.0	13.5	20.5	16.0	17.5	13.5	13.5	13.0
20	9.0	8.0	15.5	12.5	16.0	14.0	21.0	17.0	17.5	14.5	14.5	12.5
21	8.5	8.0	14.5	11.5	15.0	12.5	22.5	18.0	17.0	14.0	14.5	12.5
22	9.5	7.5	12.5	10.5	15.5	13.5	21.5	18.0	17.0	14.0	14.5	12.0
23	10.5	8.0	12.5	10.0	15.0	13.5	21.0	17.5	17.5	14.5	15.0	13.0
24	10.0	8.5	11.0	10.0	14.5	13.0	20.5	17.0	17.0	15.0	15.0	13.5
25	10.5	7.5	10.0	9.0	14.0	12.0	20.5	16.5	17.0	13.5	15.5	13.0
26	12.0	9.5	9.0	8.5	14.0	12.0	21.5	17.0	17.0	14.0	15.5	13.5
27	13.0	10.5	10.0	8.5	16.5	12.5	22.0	17.5	15.5	14.0	14.5	13.5
28	12.5	10.5	12.5	9.5	17.0	14.0	22.0	17.5	16.0	12.5	15.5	13.0
29	10.5	9.0	12.5	10.5	17.5	14.0	20.5	16.5	16.0	13.0	15.5	13.5
30	12.0	9.0	13.0	10.0	18.0	14.0	20.5	16.5	14.0	13.0	---	---
31	---	---	13.5	11.5	---	---	21.0	17.0	14.5	12.5	---	---
MONTH	13.0	5.5	15.5	8.5	18.0	9.5	22.5	12.5	20.0	12.5	17.0	12.0

14190500 LUCKIAMUTE RIVER NEAR SUVER, OR

LOCATION.--Lat 44°47'00", long 123°14'00", in SW¼SW¼ sec.18, T.9 S., R.4 W., Polk County, Hydrologic Unit 17090003, on right bank 10 ft (3 m) upstream from highway bridge at Helmick State Park, 3.0 mi (4.8 km) northwest of Suver, 4.7 mi (7.6 km) downstream from Little Luckiamute River, and at mile 13.5 (21.7 km).

DRAINAGE AREA.--240 mi² (622 km²).

PERIOD OF RECORD.--August 1905 to October 1911, July 1940 to current year.

REVISED RECORDS.--WSP 1044: Drainage area. WSP 1094: 1945-46. WSP 1248: 1905-11.

GAGE.--Water-stage recorder. Datum of gage is 171.92 ft (52.401 m) National Geodetic Vertical Datum of 1929. Aug. 18, 1905, to Oct. 31, 1911, nonrecording gage at present site at different datum, Aug. 20 to Oct. 15, 1940, nonrecording gage at present site and datum.

REMARKS.--Records good. Some diurnal fluctuation during periods of low flow caused by millpond above station. A few small diversions for irrigation above station.

AVERAGE DISCHARGE.--46 years, 910 ft³/s (25.77 m³/s), 51.49 in/yr (1,308 mm/yr), 659,300 acre-ft/yr (813 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,900 ft³/s (932 m³/s) Dec. 22, 1964, gage height, 34.52 ft (10.522 m); minimum, 0.65 ft³/s (0.018 m³/s) Aug. 13, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 6,600 ft³/s (187 m³/s) and maximum discharge, 9,750 ft³/s (276 m³/s) Jan. 13, gage height, 28.51 ft (8.690 m); minimum, 19 ft³/s (0.54 m³/s) Aug. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	463	556	1850	762	1260	622	461	160	88	26	29
2	30	343	1660	1660	1380	1140	579	433	156	81	27	27
3	30	326	2350	1500	2010	1030	547	413	157	78	29	26
4	30	349	2300	1290	1640	948	543	391	154	84	41	29
5	29	509	2670	1920	1340	919	579	372	146	127	27	28
6	28	497	1780	1810	1590	914	997	354	139	103	26	27
7	29	403	1330	1470	1680	815	1290	341	143	93	30	27
8	30	332	1080	1420	1420	759	1210	324	150	72	30	28
9	30	284	907	2980	1260	703	1360	326	137	68	29	26
10	29	248	932	4370	1130	665	1850	335	127	65	28	23
11	28	224	789	3540	1020	703	1750	307	120	63	30	24
12	27	203	792	4610	927	774	1420	291	118	61	25	24
13	27	183	829	9200	854	1410	1200	279	124	61	24	29
14	28	170	777	8230	798	2280	1070	265	208	70	27	31
15	31	160	878	7240	762	2240	1140	258	177	54	26	31
16	32	155	866	4870	738	1930	971	251	146	53	24	29
17	32	173	829	3530	714	1630	856	236	133	50	28	27
18	35	269	1450	2450	1080	1710	777	223	124	45	32	26
19	142	501	1740	1910	1640	1520	745	213	117	46	27	28
20	251	463	1920	1610	1340	1410	938	204	109	42	26	40
21	264	383	2850	1380	1150	1370	1030	197	103	57	25	62
22	143	373	3350	1220	1040	1220	955	200	105	39	24	46
23	141	965	2530	1100	1030	1110	857	223	106	34	23	39
24	189	1280	2580	997	974	1010	782	223	101	31	26	34
25	331	1480	2050	914	968	922	714	204	139	36	25	32
26	406	1300	1630	851	1360	866	652	200	151	33	24	30
27	387	1050	1350	779	1450	848	602	202	128	30	24	28
28	410	845	1170	709	1510	762	559	194	116	41	23	28
29	367	708	1030	652	1390	709	521	182	108	29	23	32
30	298	619	935	628	---	679	488	172	102	25	24	33
31	474	---	966	610	---	644	---	161	---	29	26	---
TOTAL	4338	15258	46876	77300	34957	34900	27604	8435	4004	1788	829	923
MEAN	140	509	1512	2494	1205	1126	920	272	133	57.7	26.7	30.8
MAX	474	1480	3350	9200	2010	2280	1850	461	208	127	41	62
MIN	27	155	556	610	714	644	488	161	101	25	23	23
AC-FT	8600	30260	92980	153300	69340	69220	54750	16730	7940	3550	1640	1830

CAL YR 1979 TOTAL 237255 MEAN 650 MAX 5580 MIN 18 AC-FT 470600
WTR YR 1980 TOTAL 257212 MEAN 703 MAX 9200 MIN 23 AC-FT 510200

14191000 WILLAMETTE RIVER AT SALEM, OR

LOCATION.--Lat 44°56'40", long 123°02'30", in SE¼SW¼ sec. 22, T.7 S., R.3 W., Marion County, Hydrologic Unit 17090007, on right bank 300 ft (91 m) upstream from Center Street Bridge in Salem and at mile 84.16 (135.41 km).

DRAINAGE AREA.--7,280 mi² (18,900 km²), approximatley.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1909 to December 1916, January 1923 to current year. Monthly discharge only January 1923 to September 1927, published in WSP 1318. Gage-height records collected at about the same site since 1892 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1318: 1915(M).

GAGE.--Water-stage recorder. Datum of gage is 106.14 ft (32.351 m) National Geodetic Vertical Datum of 1929. Oct. 1, 1909, to Dec. 31, 1916, nonrecording gage at site 0.5 mi (0.8 km) upstream at datum 8.00 ft (2.438 m) higher. Jan. 1, 1923, to Nov. 26, 1934, nonrecording gage at Center Street Bridge at datum 8.00 ft (2.438 m) higher. Nov. 27, 1934, to Sept. 30, 1962, water-stage recorder at present site at datum 8.00 ft (2.438 m) higher.

REMARKS.--Water-discharge records excellent. Flow regulated by 12 reservoirs above station (see elsewhere in this report). Many small diversions for irrigation above station; part of flow of Salem Canal, which diverts water from North Santiam River, returns to Willamette River below station, through Mill Creek at Salem.

AVERAGE DISCHARGE.--64 years, 23,510 ft³/s (665.8 m³/s), 43.86 in/yr (1,114 mm/yr), 17,030,000 acre-ft/yr (21.0 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 348,000 ft³/s (9,860 m³/s) Jan. 8, 1923, gage height, 38.3 ft (11.67 m), present datum; minimum, 2,470 ft³/s (70.0 m³/s) Aug. 27, 1940, gage height, 3.55 ft (1.082 m), present datum.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 500,000 ft³/s (14,200 m³/s) Dec. 4, 1861, gage height, about 47 ft (14.3 m) present datum, from rating curve extended above 250,000 ft³/s (7,080 m³/s) in 1916. Floods of Jan. 16, 1881, and Feb. 5, 1890, reached stages of 44.3 ft (13.50 m), discharge, 428,000 ft³/s (12,100 m³/s), and 45.1 ft (13.75 m), discharge, 448,000 ft³/s (12,700 m³/s), respectively, from floodmarks and information by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 123,000 ft³/s (3,480 m³/s) Jan. 15, gage height, 25.07 ft (7.641 m); minimum, 5,800 ft³/s (164 m³/s) July 22, gage height, 4.68 ft (1.426 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9870	23800	26600	23000	24300	22000	13900	13300	10500	8240	6020	6830
2	9870	22800	32200	24300	24000	20400	13400	12600	10500	7870	6080	7210
3	9550	20900	55700	24900	25400	18900	12700	11400	11500	7580	6350	7660
4	9350	20100	67000	25400	23800	18500	12300	10900	12800	7500	6470	8650
5	9380	22000	75400	34000	21200	19400	12400	10600	13700	7660	6330	9240
6	9410	24100	69000	50900	19800	19900	15800	10300	13000	7500	6350	9300
7	9470	23300	61100	46400	23100	18700	22600	9990	12700	7320	6370	9350
8	9500	20200	52200	39200	22000	17300	22000	9760	13000	6980	6290	9210
9	9470	18100	43200	44900	19600	15700	22700	9760	12400	6620	6270	9350
10	9470	17400	36300	55600	17800	15000	28600	9930	11700	6450	6200	9300
11	9840	16600	33600	60600	16400	16300	30400	10600	11100	6350	6220	9270
12	10100	16300	30600	68200	15300	18500	28400	10600	10600	6310	6220	9810
13	9900	15400	28600	94100	14500	21100	25800	10400	10400	6310	6240	10100
14	9990	14400	27300	113000	13900	34100	24700	10000	11100	6240	6290	10100
15	10200	13700	25100	120000	13400	48200	24600	9870	11500	6160	6310	10200
16	10600	12700	24300	106000	12800	47000	23900	9610	11000	6100	6450	10100
17	10600	12800	23700	88700	12500	37900	22500	9470	10500	6120	6550	10000
18	10800	15300	25600	80200	13800	33000	22000	9440	9990	6080	6620	9870
19	12800	20700	27000	78100	16400	29900	21000	9020	9610	5980	6650	10100
20	19500	21700	25500	76100	18300	27300	21500	8710	9130	5960	6700	10600
21	23700	19800	27300	72400	18000	26100	24100	8540	8790	5940	6650	11100
22	21700	19100	32700	65600	16700	24700	26900	8650	8600	5860	6550	11200
23	20300	25300	34500	60100	17500	22800	25900	8880	8350	5900	6570	10900
24	19100	35100	38600	53500	19200	21200	23400	9130	8190	6040	6620	10700
25	19200	45900	35200	44900	18000	19400	21800	9580	8380	6140	6620	10500
26	21500	47800	29400	39000	19500	17700	19800	10900	8740	6060	6520	10400
27	22700	42400	25200	30600	22200	17200	17800	12500	9350	6060	6620	10300
28	22300	35800	22700	29800	22400	16400	17300	13100	9330	6120	6620	10300
29	21800	31200	21100	32300	23100	15400	16800	13000	8900	5980	6650	10400
30	21000	28000	19500	31200	---	14700	14900	12400	8520	5900	6620	10300
31	21500	---	19700	29000	---	14300	---	11300	---	5900	6770	---
TOTAL	444470	702700	1095900	1742000	544900	709000	629900	324240	313880	201230	199790	292350
MEAN	14340	23420	35350	56190	18790	22870	21000	10460	10460	6491	6445	9745
MAX	23700	47800	75400	120000	25400	48200	30400	13300	13700	8240	6770	11200
MIN	9350	12700	19500	23000	12500	14300	12300	8540	8190	5860	6020	6830
CFSM	1.97	3.22	4.86	7.72	2.58	3.14	2.89	1.44	1.44	.89	.89	1.34
IN.	2.27	3.59	5.60	8.90	2.78	3.62	3.22	1.66	1.60	1.03	1.02	1.49
AC-FT	881600	1394000	2174000	3455000	1081000	1406000	1249000	643100	622600	399100	396300	579900

CAL YR 1979 TOTAL 7386400 MEAN 20240 MAX 75400 MIN 6100 CFSM 2.78 IN 37.74 AC-FT 14650000
WTR YR 1980 TOTAL 7200360 MEAN 19670 MAX 120000 MIN 5860 CFSM 2.70 IN 36.79 AC-FT 14280000

14191000 WILLAMETTE RIVER AT SALEM, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1910-12, 1951 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: February 1951 to September 1972, October 1976 to curent year.
WATER TEMPERATURES: February 1951 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 141 micromhos Sept. 17, 1966; minimum daily, 30 micromhos Jan. 29, 1965.
WATER TEMPERATURES: Maximum, 25.5°C July 23, 1959; minimum, 0.0°C on several days in 1956, 1979.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 118 micromhos July 16; minimum, 49 micromhos Jan. 14, 19.
WATER TEMPERATURES: Maximum, 23.5°C July 22; minimum, 2.0°C Jan. 29, 30.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	67	67	88	73	75	83	78	84	89	95	79
2	70	67	69	85	76	74	84	81	86	91	93	78
3	71	69	63	81	78	77	85	84	85	94	91	78
4	73	69	59	79	82	78	87	86	79	97	88	77
5	76	65	56	81	83	77	88	85	77	90	88	73
6	76	62	56	67	84	77	88	87	79	86	87	73
7	75	65	57	65	83	76	91	89	80	88	84	72
8	72	70	60	68	81	77	88	90	79	93	82	72
9	70	72	62	67	82	81	83	91	82	96	82	71
10	71	71	66	65	83	82	75	92	84	101	83	70
11	73	72	68	64	85	82	70	87	86	102	83	69
12	74	70	68	65	88	83	67	85	86	99	82	68
13	75	70	69	55	88	82	67	84	86	101	82	66
14	76	73	69	51	89	79	66	86	87	106	82	66
15	73	76	69	51	91	66	66	88	85	107	81	66
16	71	80	70	54	93	64	65	90	86	105	80	65
17	70	82	69	55	94	68	65	90	85	101	78	64
18	73	79	73	55	92	70	65	88	86	98	79	64
19	73	75	78	52	92	70	66	88	86	94	79	63
20	64	79	79	52	87	71	66	90	87	94	78	62
21	60	79	84	52	81	71	67	92	88	94	77	62
22	61	79	82	54	83	73	73	93	90	96	78	61
23	61	79	77	57	82	75	74	93	93	98	78	63
24	63	76	78	61	80	73	68	93	96	98	79	63
25	66	70	79	64	80	73	67	91	96	94	78	63
26	65	66	77	66	82	77	69	83	93	93	79	63
27	65	68	77	73	82	78	71	76	90	93	79	63
28	66	68	77	70	81	80	71	74	89	93	79	62
29	65	68	77	64	78	83	71	75	89	94	77	62
30	65	68	80	64	---	84	74	75	89	95	78	61
31	68	---	84	65	---	83	---	79	---	95	79	---
MEAN	70	72	71	64	84	76	74	86	86	96	82	67

14191000 WILLAMETTE RIVER AT SALEM, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	17.0	16.0	12.0	11.0	7.0	7.0	7.5	7.0	4.0	3.0	9.0	8.5
2	17.0	15.5	11.5	11.0	8.5	7.0	7.5	7.5	5.0	4.0	9.5	8.5
3	16.5	15.5	12.0	11.5	8.5	8.5	7.5	7.0	6.0	5.0	9.5	9.0
4	17.0	15.5	12.0	11.5	9.0	8.5	7.0	7.0	6.5	6.0	10.0	9.5
5	17.0	16.0	12.0	11.5	9.0	8.0	7.0	7.0	6.0	6.0	9.5	9.5
6	17.0	16.0	11.5	11.5	8.0	8.0	7.0	6.0	7.0	6.0	9.5	9.0
7	16.5	15.5	11.5	11.0	8.0	7.5	6.0	5.0	7.0	6.5	9.5	9.0
8	16.0	15.0	11.0	10.5	7.5	7.5	5.5	5.0	7.0	6.5	10.0	9.0
9	16.0	15.0	11.0	10.5	8.0	7.5	6.0	5.5	6.5	6.0	10.0	9.0
10	16.0	15.0	10.5	10.0	8.0	7.5	6.0	5.0	6.5	6.0	9.5	9.0
11	16.0	15.0	10.0	9.5	7.5	6.5	5.0	5.0	6.5	6.0	9.0	8.5
12	16.0	15.0	9.5	9.0	6.5	6.5	6.5	5.0	6.0	6.0	8.5	7.5
13	16.0	15.0	9.5	9.0	7.0	6.5	7.5	6.5	6.0	5.5	7.5	7.5
14	16.0	15.5	9.0	8.5	7.5	7.0	8.0	7.5	6.0	5.5	7.5	7.0
15	16.5	15.5	8.5	8.0	7.5	7.5	8.0	7.5	5.5	5.5	7.0	7.0
16	16.0	15.5	9.0	8.0	7.5	7.0	7.5	7.5	6.0	5.5	7.0	7.0
17	15.5	15.0	9.5	9.0	7.5	7.0	7.5	7.0	6.0	5.5	8.0	7.5
18	15.0	14.0	9.5	9.0	8.0	7.5	7.0	6.0	7.0	6.0	8.0	7.5
19	14.0	13.0	9.0	8.5	8.5	8.0	6.0	5.5	8.0	7.0	8.5	8.0
20	13.0	12.0	8.5	8.0	8.5	8.5	5.5	5.0	8.0	7.5	9.0	8.5
21	12.0	11.5	8.0	7.5	8.5	8.0	5.5	5.0	8.0	7.5	9.0	8.5
22	12.5	12.0	7.5	7.0	8.0	7.0	5.5	5.0	7.5	7.0	8.5	8.0
23	13.5	12.5	7.5	7.5	7.0	6.5	5.5	5.5	7.5	7.0	9.0	8.5
24	13.5	13.5	8.0	7.5	6.5	6.0	5.5	5.5	8.0	7.5	9.5	8.5
25	14.0	13.5	8.0	7.5	6.5	6.5	5.5	5.5	8.5	8.0	10.0	9.0
26	13.5	13.0	7.5	7.0	7.0	6.5	5.5	5.0	9.0	8.5	10.0	9.5
27	13.5	13.0	7.0	6.5	6.5	6.0	5.0	3.5	9.5	9.0	10.0	9.0
28	13.5	13.0	6.5	6.0	6.0	5.5	3.5	2.5	10.0	9.5	9.5	9.0
29	13.0	12.0	6.5	6.0	6.0	5.5	2.5	2.0	9.5	9.0	9.5	9.5
30	12.0	12.0	7.0	6.5	6.0	6.0	2.5	2.0	---	---	9.5	9.0
31	12.5	12.0	---	---	7.0	6.0	3.0	2.5	---	---	9.5	9.0
MONTH	17.0	11.5	12.0	6.0	9.0	5.5	8.0	2.0	10.0	3.0	10.0	7.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.0	8.5	14.5	13.0	---	---	19.5	17.5	21.5	20.0	16.5	15.0
2	9.5	8.5	14.5	13.5	---	---	19.0	18.0	21.0	20.0	17.5	16.5
3	9.5	9.0	15.0	13.0	---	---	18.5	17.0	20.0	19.0	18.0	17.0
4	10.0	9.5	16.0	14.0	---	---	17.0	16.0	20.0	18.5	18.0	16.5
5	10.0	9.5	15.5	15.0	---	---	16.5	15.5	19.5	19.0	18.0	16.5
6	9.5	9.0	15.0	14.5	---	---	17.5	15.5	19.5	18.5	18.0	16.5
7	9.0	8.5	15.5	14.0	---	---	19.0	16.5	20.0	18.5	18.0	17.0
8	8.5	8.0	14.5	14.0	---	---	20.0	18.5	20.5	19.0	18.0	16.5
9	9.5	8.5	14.0	13.5	---	---	19.5	18.5	21.0	19.5	18.0	16.5
10	10.0	9.0	13.5	12.5	---	---	19.5	17.5	21.0	20.0	19.0	17.5
11	10.0	9.5	12.5	12.0	---	---	19.0	18.0	21.0	20.0	19.0	17.5
12	11.0	10.0	12.5	11.5	---	---	20.0	18.0	20.5	19.5	18.0	17.0
13	12.0	11.0	12.5	11.5	---	---	20.5	19.0	19.5	18.5	17.0	15.0
14	12.0	11.5	13.5	12.0	---	---	20.0	19.5	19.5	18.5	15.0	14.0
15	11.5	11.0	13.5	12.5	---	---	21.0	19.0	19.0	18.0	16.0	14.0
16	12.0	11.0	14.5	12.5	---	---	21.5	20.0	19.5	18.0	16.5	14.5
17	12.0	11.5	16.0	13.5	---	---	21.5	20.5	19.5	18.5	17.0	15.5
18	12.0	11.5	16.5	15.0	17.0	---	21.5	20.0	19.0	18.0	16.5	15.5
19	12.0	11.5	17.0	15.5	18.0	16.0	21.5	20.0	19.0	17.5	15.5	14.5
20	11.5	10.5	17.0	15.5	18.0	17.0	22.0	20.5	19.0	17.5	15.0	14.0
21	11.0	10.5	16.5	15.5	17.5	16.5	23.0	21.0	18.5	17.5	15.0	14.5
22	11.0	10.5	16.0	---	17.5	16.0	23.5	22.0	19.0	17.5	15.0	14.5
23	11.5	10.5	---	---	17.5	16.5	22.5	21.5	19.0	17.5	15.5	14.5
24	12.0	11.0	---	---	17.0	16.0	22.0	21.0	18.5	17.5	16.0	14.5
25	12.0	11.0	---	---	16.0	15.5	22.0	20.5	19.0	17.5	16.0	15.0
26	13.0	11.5	---	---	15.5	15.0	22.0	20.5	18.5	17.5	16.0	15.0
27	14.5	12.5	---	---	16.5	15.0	22.5	21.0	18.0	17.5	15.5	15.0
28	14.5	13.5	---	---	18.0	16.0	23.0	21.5	17.5	17.0	15.5	14.5
29	13.5	13.0	---	---	18.0	16.5	22.0	21.0	17.5	16.5	16.0	15.0
30	13.5	12.5	---	---	19.0	17.0	21.5	20.5	17.0	16.5	16.5	15.5
31	---	---	---	---	---	---	22.0	20.5	16.5	16.0	---	---
MONTH	14.5	8.0	17.0	11.5	19.0	15.0	23.5	15.5	21.5	16.0	19.0	14.0

14192500 SOUTH YAMHILL RIVER NEAR WILLAMINA, OR

LOCATION.--Lat 45°02'50", long 123°30'10", in NE¼SE¼ sec.14, T.6 S., R.7 W., Polk County, Hydrologic Unit 17090008, on left bank 2.3 mi (3.7 km) southwest of Willamina, 2.8 mi (4.5 km) upstream from Willamina Creek, and at mile 45.5 (73.2 km).

DRAINAGE AREA.--133 mi² (344 km²).

PERIOD OF RECORD.--May 1934 to current year.

REVISED RECORDS.--WSP 814: Drainage area. WSP 1318: 1934.

GAGE.--Water-stage recorder. Datum of gage is 235.55 ft (71.796 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records excellent. Slight regulation occasionally at low flows by millpond upstream. No diversion above station.

AVERAGE DISCHARGE.--46 years, 622 ft³/s (17.62 m³/s), 63.51 in/yr (1,613 mm/yr), 450,600 acre-ft/yr (556 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,600 ft³/s (555 m³/s) Dec. 22, 1964, gage height, 17.07 ft (5.203 m); minimum, 2.6 ft³/s (0.074 m³/s) Oct. 11, 1952.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 5,700 ft³/s (161 m³/s) and maximum discharge, 8,920 ft³/s (253 m³/s) Jan. 12, gage height, 10.68 ft (3.255 m); minimum, 10 ft³/s (0.28 m³/s) Sept. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	352	576	2450	564	967	411	268	96	46	17	19
2	15	303	3310	1680	1260	825	381	248	117	45	17	21
3	14	433	1830	1380	1350	726	354	231	117	46	17	26
4	14	548	3530	1210	1010	643	381	219	110	71	17	19
5	14	604	2230	1460	858	638	474	207	96	62	17	15
6	14	478	1520	1140	1390	596	949	195	94	52	17	14
7	15	390	1120	979	1160	529	932	181	98	46	16	13
8	16	325	858	1320	973	487	973	175	91	42	15	13
9	14	271	755	3130	825	442	1520	185	85	41	15	12
10	14	235	749	2590	716	419	1720	175	81	44	13	12
11	13	207	594	2260	619	564	1310	159	77	41	13	11
12	14	187	682	7420	547	949	1040	150	75	40	13	11
13	14	169	613	7190	491	2040	864	144	79	38	15	12
14	17	156	628	5520	446	1900	869	136	100	36	14	15
15	21	142	836	3420	430	1620	926	130	85	34	13	15
16	22	140	728	3080	400	1320	731	125	75	30	13	13
17	24	181	881	2340	426	1270	629	117	71	29	14	12
18	48	299	1480	1750	1810	1400	555	112	66	28	14	13
19	352	333	1960	1340	1610	1230	582	107	62	27	20	18
20	213	261	2160	1060	1190	1190	696	100	57	28	15	57
21	120	229	2880	858	949	1040	696	98	57	26	13	46
22	107	548	2170	721	820	909	610	110	59	24	13	30
23	382	903	1860	615	762	809	538	130	57	23	13	23
24	364	1070	1900	538	716	706	499	110	66	22	12	20
25	662	1240	1480	479	741	629	446	139	94	22	13	17
26	530	1140	1180	430	1260	615	403	136	73	21	12	16
27	713	915	961	377	1320	578	366	128	62	20	13	15
28	608	739	803	320	1300	512	334	117	56	18	17	15
29	457	613	687	280	1160	483	315	107	52	17	17	19
30	405	557	657	280	---	470	289	100	49	17	15	18
31	466	---	1720	285	---	434	---	94	---	17	15	---
TOTAL	5698	13968	43338	57902	27103	26940	20793	4633	2357	1053	458	560
MEAN	184	466	1398	1868	935	869	693	149	78.6	34.0	14.8	18.7
MAX	713	1240	3530	7420	1810	2040	1720	268	117	71	20	57
MIN	13	140	576	280	400	419	289	94	49	17	12	11
CFSM	1.38	3.50	10.5	14.0	7.03	6.53	5.21	1.12	.59	.26	.11	.14
IN.	1.59	3.91	12.12	16.20	7.58	7.54	5.82	1.30	.66	.29	.13	.16
AC-FT	11300	27710	85960	114800	53760	53440	41240	9190	4680	2090	908	1110

CAL YR 1979 TOTAL 176994 MEAN 485 MAX 5840 MIN 13 CFSM 3.65 IN 49.50 AC-FT 351100
WTR YR 1980 TOTAL 204803 MEAN 560 MAX 7420 MIN 11 CFSM 4.21 IN 57.28 AC-FT 406200

14193000 WILLAMINA CREEK NEAR WILLAMINA, OR

LOCATION.--Lat 45°08'35", long 123°29'35", in NE¼NW¼ sec.13, T.5 S., R.7 W., Yamhill County, Hydrologic Unit 17090008, on right bank 4.5 mi (7.2 km) north of Willamina and at mile 6.2 (10.0 km).

DRAINAGE AREA.--64.7 mi² (167.6 km²).

PERIOD OF RECORD.--June 1934 to current year.

REVISED RECORDS.--WSP 1738: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 315 ft (96.0 m) National Geodetic Vertical Datum of 1929 (plane-table survey). Prior to Oct. 1, 1939, water-stage recorder at site on left bank at datum 1.00 ft (0.305 m) higher. Oct. 1, 1939, to Aug. 5, 1968, water-stage recorder at site on left bank at present datum.

REMARKS.--Records excellent. No regulation or diversion above station.

AVERAGE DISCHARGE.--46 years, 260 ft³/s (7.363 m³/s), 54.57 in/yr (1,386 mm/yr), 188,400 acre-ft/yr (232 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,800 ft³/s (306 m³/s) Dec. 22, 1964, gage height, 13.54 ft (4.126 m), from rating curve extended above 3,400 ft³/s (96.3 m³/s) on basis of slope-area measurement at gage height 11.65 ft (3.551 m); minimum, 5.4 ft³/s (0.15 m³/s) July 15, 1967.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 31, 1931, reached a stage of about 12 ft (3.6 m) from information by local resident, discharge, 8,200 ft³/s (232 m³/s) from rating curve extended above 3,400 ft³/s (96.3 m³/s) on basis of slope-area measurement at gage height 11.65 ft (3.551 m).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,300 ft³/s (65.1 m³/s) and maximum discharge, 3,520 ft³/s (99.7 m³/s) Jan. 13, gage height, 8.33 ft (2.539 m); minimum, 12 ft³/s (0.34 m³/s) many days in October, August and September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	102	191	771	212	407	223	143	64	38	19	18
2	13	85	916	635	369	369	207	138	72	37	20	19
3	13	100	555	547	414	337	193	132	67	41	21	18
4	12	148	828	526	349	306	198	123	64	49	19	16
5	12	166	635	608	320	301	232	121	60	42	19	15
6	13	134	480	508	417	276	397	115	60	38	20	14
7	14	108	382	453	385	244	394	111	61	36	20	15
8	14	92	312	612	349	223	433	109	57	34	19	14
9	13	80	283	1300	317	207	600	119	55	34	18	14
10	12	72	263	1020	290	201	655	109	54	35	18	13
11	12	65	226	878	263	232	551	102	52	34	17	13
12	12	60	328	2550	238	354	470	97	50	33	17	13
13	13	56	306	2940	221	716	404	93	55	32	18	14
14	16	52	303	2260	204	695	394	90	58	31	17	16
15	18	49	376	1500	193	616	366	87	52	30	17	15
16	18	48	343	1370	180	551	320	85	50	29	18	14
17	20	54	410	1070	180	547	293	82	48	28	17	13
18	48	73	635	828	551	574	263	79	46	27	18	14
19	125	92	749	663	494	540	257	76	44	27	18	19
20	70	73	902	540	410	570	298	74	42	27	17	34
21	44	66	1310	460	357	533	293	73	43	25	16	23
22	36	138	989	397	323	473	263	82	43	23	15	19
23	97	238	797	349	312	430	241	83	42	24	15	17
24	90	293	703	312	293	388	218	76	58	23	15	16
25	150	354	570	276	301	349	207	79	69	23	15	15
26	125	323	480	247	440	343	193	77	54	22	14	14
27	209	270	414	215	450	317	180	74	48	21	16	14
28	138	218	360	201	497	287	168	72	44	20	16	15
29	100	183	323	191	456	270	161	69	42	19	16	16
30	109	161	298	183	---	257	152	66	40	19	16	15
31	148	---	585	171	---	241	---	64	---	19	19	---
TOTAL	1727	3953	16252	24581	9785	12154	9224	2900	1594	920	540	485
MEAN	55.7	132	524	793	337	392	307	93.5	53.1	29.7	17.4	16.2
MAX	209	354	1310	2940	551	716	655	143	72	49	21	34
MIN	12	48	191	171	180	201	152	64	40	19	14	13
CFSM	.86	2.04	8.10	12.3	5.21	6.06	4.75	1.45	.82	.46	.27	.25
IN.	.99	2.27	9.34	14.13	5.63	6.99	5.30	1.67	.92	.53	.31	.28
AC-FT	3430	7840	32240	48760	19410	24110	18300	5750	3160	1820	1070	962

CAL YR 1979	TOTAL	71836	MEAN 197	MAX 2030	MIN 12	CFSM 3.05	IN 41.30	AC-FT	142500	
WTR YR 1980	TOTAL	84115	MEAN 230	MAX 2940	MIN 12	CFSM 3.56	IN 48.36	AC-FT	166800	

14194000 SOUTH YAMHILL RIVER NEAR WHITESON, OR

LOCATION.--Lat 45°10'08", long 123°12'25", in NE¼NW¼ sec.5, T.5 S., R.4 W., Yamhill County, Hydrologic Unit 17090008, near left bank on downstream side fo Whiteson Bridge on State Highway 99W, 1.3 mi (2.1 km) northwest of Whiteson, 1.4 mi (2.3 km) downstream from Salt Creek, and at mile 16.71 (26.89 km).

DRAINAGE AREA.--502 mi^2 (1,300 km^2).

PERIOD OF RECORD.--July 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 82.30 ft (25.085 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 20, 1940, nonrecording gage at present site and datum.

REMARKS.--Records good. Slight regulation during low-water periods by logpond upstream. Many small diversions for irrigation above station.

AVERAGE DISCHARGE.--40 years, 1,764 ft^3/s (49.96 m^3/s), 47.72 in/yr (1,212 mm/yr), 1,278,000 acre-ft/yr (1.58 km^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 47,200 ft^3/s (1,340 m^3/s) Dec. 23, 1964, gage height, 47.20 ft (14.387 m); minimum, 3.2 ft^3/s (0.091 m^3/s) Aug. 24, 1967.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of December 1937 reached a stage of 46.9 ft (14.30 m), from Oregon State Highway Department bridge plans.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 13,000 ft^3/s (368 m^3/s) and maximum discharge, 24,700 ft^3/s (700 m^3/s) Jan. 14, gage height, 42.44 ft (12.936 m); minimum, 16 ft^3/s (0.45 m^3/s) Aug. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	955	1200	6360	1040	3270	1270	862	291	145	24	32
2	34	770	3780	6420	2160	2710	1170	801	295	140	22	37
3	33	792	6140	4890	4010	2320	1080	737	325	140	25	41
4	32	971	5560	3750	3600	2030	1060	696	314	150	29	46
5	28	1410	6980	4490	2920	1870	1170	654	291	200	25	39
6	26	1270	5200	4410	2970	1930	1950	634	271	160	25	32
7	27	1020	3530	3640	3440	1720	3130	613	271	142	25	30
8	34	840	2600	3190	2850	1560	2880	570	277	116	29	30
9	34	711	2100	5940	2390	1410	3270	572	262	108	27	28
10	33	618	2070	9070	2060	1300	4600	592	245	106	28	26
11	30	543	1810	8390	1810	1420	4330	531	240	103	24	23
12	28	482	1800	9980	1610	1950	3390	506	230	101	25	22
13	27	437	1940	22900	1460	4550	2670	499	231	102	22	24
14	29	403	1770	23700	1350	5810	2240	464	285	94	23	26
15	35	377	1940	20100	1260	5670	2410	437	288	83	22	32
16	41	352	2000	14700	1190	5060	2080	419	255	80	26	35
17	42	355	1810	11100	1150	4160	1780	392	230	72	26	31
18	49	480	3180	7420	2410	4100	1570	371	210	68	30	30
19	283	711	4270	4860	5600	3710	1470	355	200	62	25	32
20	640	679	5290	3560	4320	3350	1880	340	180	64	26	43
21	374	598	6700	2880	3120	3250	2380	330	170	66	29	103
22	248	592	7950	2400	2470	2800	2270	347	170	56	25	94
23	350	1820	6540	2060	2240	2450	1870	390	170	49	20	65
24	750	2140	6390	1810	2050	2180	1590	398	170	48	25	54
25	1090	2830	6060	1620	1990	1940	1410	375	200	44	25	46
26	1160	3020	4620	1460	3050	1770	1270	400	262	39	20	42
27	1290	2610	3450	1300	4050	1770	1150	382	210	44	19	37
28	1400	1990	2680	1130	4290	1580	1050	364	180	43	20	36
29	1160	1570	2210	1030	3950	1450	976	337	160	28	21	36
30	890	1330	1960	950	---	1420	923	314	150	25	25	39
31	1040	---	2280	900	---	1320	---	300	---	20	29	---
TOTAL	11272	32676	115810	196410	76810	81830	60289	14982	7033	2698	766	1191
MEAN	364	1089	3736	6336	2649	2640	2010	483	234	87.0	24.7	39.7
MAX	1400	3020	7950	23700	5600	5810	4600	862	325	200	30	103
MIN	26	352	1200	900	1040	1300	923	300	150	20	19	22
CFSM	.73	2.17	7.44	12.6	5.28	5.26	4.00	.96	.47	.17	.05	.08
IN.	.84	2.42	8.58	14.55	5.69	6.06	4.47	1.11	.52	.20	.06	.09
AC-FT	22360	64810	229700	389600	152400	162300	119600	29720	13950	5350	1520	2360

CAL YR 1979	TOTAL	476851	MEAN	1306	MAX	12500	MIN	17	CFSM	2.60	IN	35.34	AC-FT	945800
WTR YR 1980	TOTAL	601767	MEAN	1644	MAX	23700	MIN	19	CFSM	3.28	IN	44.59	AC-FT	1194000

14194300 NORTH YAMHILL RIVER NEAR FAIRDALE, OR

LOCATION.--Lat 45°21'55", long 123°22'40", in SW¼ sec.25, T.2 S., R.6 W., Yamhill County, Hydrologic Unit 17090008, on right bank 0.4 mi (0.6 km) downstream from small tributary, 1.3 mi (2.1 km) upstream from Kutch Creek, 2.1 mi (3.4 km) west of Fairdale, 9.5 mi (15.3 km) west of Yamhill and at mile 28.4 (45.7 km).

DRAINAGE AREA.--9.03 mi² (23.39 km²).

PERIOD OF RECORD.--October 1958 to March 1966, October 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 560 ft (171 m), from topographic map.

REMARKS.--Records excellent. No regulation or diversion above station.

AVERAGE DISCHARGE.--20 years (water years 1959-65, 1968-80), 48.1 ft³/s (1.362 m³/s), 72.34 in/yr (1,837 mm/yr), 34,850 acre-ft/yr (43.0 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,330 ft³/s (66.0 m³/s) Dec. 22, 1964, gage height, 6.88 ft (2.097 m), from rating curve extended above 1,000 ft³/s (28.3 m³/s); maximum gage height, 9.7 ft (2.96 m) Dec. 23, 1964 (backwater from debris); minimum discharge, 2.3 ft³/s (0.065 m³/s) Sept. 23-26, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 350 ft³/s (9.91 m³/s) and maximum discharge, 411 ft³/s (11.6 m³/s) Jan. 12, gage height, 4.30 ft (1.311 m); minimum, 2.5 ft³/s (0.071 m³/s) Oct. 10, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	19	44	131	39	81	44	26	13	7.4	4.1	3.7
2	2.8	18	145	118	60	70	42	25	13	7.4	4.1	4.6
3	2.8	22	98	99	67	61	40	24	13	8.1	4.4	3.7
4	2.7	30	131	92	59	55	42	23	12	8.9	4.1	3.3
5	2.8	33	106	92	55	55	52	22	12	7.7	3.9	3.2
6	2.8	28	80	80	91	51	72	21	12	7.0	4.1	3.0
7	2.8	23	63	70	89	47	68	21	12	6.7	3.9	3.2
8	2.8	20	51	94	77	44	73	20	11	6.7	3.7	3.0
9	2.8	18	47	175	65	41	119	21	11	6.7	3.7	2.8
10	2.7	16	43	132	57	41	131	20	11	6.7	3.5	2.8
11	2.7	14	38	115	51	46	109	19	10	6.7	3.5	3.0
12	2.8	13	61	331	46	54	88	18	10	6.3	3.5	3.2
13	2.8	12	57	334	42	80	76	18	11	6.0	3.7	3.3
14	3.2	11	68	277	39	76	73	17	11	6.0	3.5	3.5
15	3.0	10	80	202	36	68	68	16	10	6.0	3.5	3.3
16	3.2	11	73	182	34	61	59	16	9.8	5.7	3.7	3.0
17	3.2	16	80	157	36	69	53	16	9.3	6.0	3.5	2.8
18	9.8	24	102	129	91	81	49	15	8.9	5.7	3.7	3.5
19	19	24	112	106	88	79	49	15	8.5	5.7	3.5	4.4
20	14	20	122	88	77	85	53	14	8.5	5.7	3.3	6.7
21	7.0	17	148	76	67	85	49	14	8.9	5.2	3.2	4.4
22	9.8	41	129	64	60	79	45	16	8.5	5.2	3.2	3.7
23	21	57	107	57	54	72	42	16	8.5	4.9	3.0	3.5
24	24	67	98	52	52	65	39	15	12	4.9	3.2	3.2
25	33	72	87	49	55	59	36	15	12	4.9	3.0	3.0
26	27	60	77	44	85	59	34	14	9.8	4.6	3.0	3.0
27	40	47	70	39	89	55	32	14	8.9	4.6	3.3	3.0
28	27	39	61	37	97	51	30	14	8.5	4.4	3.3	3.5
29	20	33	57	36	91	50	29	13	8.1	4.4	3.2	3.5
30	23	30	53	34	---	47	28	13	7.7	4.4	3.9	3.2
31	24	---	95	32	---	46	---	12	---	4.4	3.9	---
TOTAL	347.3	845	2583	3524	1849	1913	1724	543	309.9	185.0	111.1	104.0
MEAN	11.2	28.2	83.3	114	63.8	61.7	57.5	17.5	10.3	5.97	3.58	3.47
MAX	40	72	148	334	97	85	131	26	13	8.9	4.4	6.7
MIN	2.7	10	38	32	34	41	28	12	7.7	4.4	3.0	2.8
CFSM	1.24	3.12	9.23	12.6	7.07	6.83	6.37	1.94	1.14	.66	.40	.38
IN.	1.43	3.48	10.64	14.52	7.62	7.88	7.10	2.24	1.28	.76	.46	.43
AC-FT	689	1680	5120	6990	3670	3790	3420	1080	615	367	220	206

CAL YR 1979 TOTAL 12253.8 MEAN 33.6 MAX 287 MIN 2.7 CFSM 3.72 IN 50.48 AC-FT 24310
WTR YR 1980 TOTAL 14038.3 MEAN 38.4 MAX 334 MIN 2.7 CFSM 4.25 IN 57.83 AC-FT 27840

14195500 HASKINS CREEK RESERVOIR NEAR MCMINNVILLE, OR

LOCATION.--Lat 45°18'43", long 123°21'23", in SW¼NW¼ sec.18, T.3 S., R.5 W., Yamhill County, Hydrologic Unit 17090008, on control tower 250 ft (76 m) upstream from dam on Haskins Creek, 11 mi (18 km) northwest of McMinnville, and at mile 5.1 (8.2 km).

DRAINAGE AREA.--6.88 mi² (17.82 km²).

PERIOD OF RECORD.--October 1951 to current year.

REVISED RECORDS.--WSP 1738: Drainage area. The maximum contents for water year 1978 published in the report for that year is in error and should not be used, see revision published in the report for water year 1979.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by city of McMinnville).

REMARKS.--Reservoir is formed by earthfill dam equipped with five siphon spillways which act as overflow weirs until priming occurs, approximately 835.5 ft (254.66 m) elevation. Capacity of reservoir is 733 acre-ft (904,000 m³) between elevations 761.5 ft (232.11 m), invert of outlet tunnel, and 835.0 ft (254.51 m), crest of siphon spillways. Dead storage negligible. Rated capacity of three siphons is 700 ft³/s (19.8 m³/s) each and remaining two siphons 350 ft³/s (9.91 m³/s) each. Under normal operation, reservoir is filled in the spring (April or May) and drained when fall rains start. There is no planned storage during winter months; however, during periods of heavy runoff, inflow may be greater than capacity of outlet tunnel and there may be some temporary storage. Water is used for municipal supply of city of McMinnville.

COOPERATION.--Elevation and capacity table furnished by city of McMinnville, Water and Light Department.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 748 acre-ft (922,000 m³) Nov. 17, 1954, elevation, 835.65 ft (254.706 m); no contents most of time during winter months.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 733 acre-ft (904,000 m³) many days during the year, elevation, 835.0 ft (254.51 m); no contents many days during winter months.

MONTHEND ELEVATIONS AND CONTENTS AT 0800, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept.30	830.2	628	-
Oct. 31	835.0	733	+105
Nov. 30	835.0	733	0
Dec. 31	-	0	-733
CAL YR 1979	-	-	-733
Jan. 31	-	0	0
Feb. 29	-	0	0
Mar. 31	835.0	733	+733
Apr. 30	835.0	733	0
May 31	835.0	733	0
June 30	834.2	715	-18
July 31	820.4	445	-270
Aug. 31	832.9	686	+241
Sept.30	828.0	583	-103
WTR YR 1980	-	-	-45

14196001 HASKINS CREEK BELOW RESERVOIR, NEAR MCMINNVILLE, OR

LOCATION (REVISED).--Lat 45°18'39", long 123°21'06", in SE¼NW¼ sec.18, T.3 S., R.5 W., Yamhill County, Hydrologic Unit 17090008, on right bank 800 ft (244 m) downstream from Haskins Creek Reservoir, 11 mi (18 km) northwest of McMinnville, and at mile 5.0 (8.0 km).

DRAINAGE AREA.--6.90 mi² (17.87 km²).

PERIOD OF RECORD.--October 1951 to current year.

REVISED RECORDS.--WSP 1738: Drainage area. Maximum discharge for water year 1957, published in WSP 1518, has been found to be unreliable and should not be used.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 707 ft (215 m) National Geodetic Vertical Datum of 1929 (topographic survey of 1955). Prior to Aug. 5, 1952, water-stage recorder at site 600 ft (183 m) upstream at different datum.

REMARKS.--Records good. All records given herein include flow in pipeline which diverts 600 ft (183 m) above station for municipal supply of McMinnville. Flow regulated by Haskin Creek Reservoir (see station 14195500); during winter months reservoir is empty except when inflow exceeds capacity of outlet tunnel. Monthly figures adjusted for diversion from McGuire Lake in the Nestucca River basin and for storage in Haskins Creek Reservoir.

COOPERATION.--Meter readings for diversion and elevations of Haskins Creek Reservoir furnished by city of McMinnville.

AVERAGE DISCHARGE.--29 years, 32.3 ft³/s (0.915 m³/s), 63.57 in/yr (1,615 mm/yr), 23,400 acre-ft/yr (28.9 hm³/yr), adjusted for storage and diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,030 ft³/s (29.2 m³/s) Dec. 23, 1964, gage height, 5.98 ft (1.823 m), from floodmark, from rating curve extended above 400 ft³/s (11.3 m³/s) on basis of slope-area measurement of peak flow; maximum daily, 515 ft³/s (14.6 m³/s) Jan. 21, 1972; minimum daily, 0.10 ft³/s (0.003 m³/s) Oct. 27, 28, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 246 ft³/s (6.97 m³/s) Jan. 14; minimum daily, 3.8 ft³/s (0.11 m³/s) Mar. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	14	28	92	32	6.8	29	20	9.1	10	9.7	5.1
2	5.4	14	86	85	55	6.8	27	20	10	12	8.5	13
3	5.5	16	51	86	50	3.8	26	19	10	9.9	10	16
4	7.2	21	74	67	21	5.3	28	19	7.7	7.1	13	12
5	7.2	22	58	68	6.4	5.7	39	17	11	5.8	9.3	10
6	6.4	19	47	59	6.3	6.2	43	17	9.7	4.6	8.8	11
7	5.6	16	39	31	5.7	7.5	44	16	8.9	9.2	15	12
8	5.6	14	32	71	5.1	13	57	16	8.1	13	12	12
9	5.6	12	29	108	5.7	31	74	17	8.9	13	12	12
10	5.6	11	28	108	5.1	26	86	16	9.7	11	13	12
11	6.1	11	24	131	5.8	21	70	15	8.6	8.9	13	8.0
12	5.5	11	34	198	68	13	61	14	8.7	6.9	10	6.4
13	5.5	12	31	236	117	62	54	14	8.9	10	9.9	6.1
14	5.5	11	34	246	106	56	54	15	6.2	9.8	9.9	6.1
15	5.3	8.8	39	233	94	45	43	13	8.3	9.9	11	7.6
16	9.8	9.8	38	209	73	51	42	13	8.7	11	9.9	8.3
17	11	11	48	171	32	49	38	13	8.8	11	8.7	8.9
18	15	15	67	53	60	58	35	13	9.3	10	6.8	6.6
19	19	13	71	6.4	72	52	35	13	10	9.2	11	4.7
20	9.5	12	88	4.4	73	58	37	12	12	8.9	14	4.6
21	7.7	12	141	4.3	48	56	35	12	7.8	13	9.7	5.1
22	7.4	23	157	4.4	43	53	33	12	8.4	15	10	5.9
23	12	32	151	90	40	51	30	12	8.2	10	11	6.7
24	15	36	117	157	38	44	26	11	6.6	11	8.7	6.8
25	21	39	92	159	46	44	26	11	6.1	12	9.9	6.6
26	18	32	120	79	83	38	24	11	5.2	13	10	6.6
27	25	26	136	41	81	39	25	11	6.7	12	9.4	6.6
28	19	23	99	34	79	36	22	12	7.2	12	7.6	5.8
29	16	22	48	29	35	35	22	11	6.4	12	7.9	5.6
30	17	20	41	28	---	32	21	10	6.2	15	7.3	5.7
31	20	---	63	26	---	32	---	8.9	---	12	5.2	---
TOTAL	329.7	538.6	2111	2914.5	1386.1	1037.1	1186	433.9	251.4	328.2	312.2	243.8
MEAN	10.6	18.0	68.1	94.0	47.8	33.5	39.5	14.0	8.38	10.6	10.1	8.13
MAX	25	39	157	246	117	62	86	20	12	15	15	16
MIN	5.3	8.8	24	4.3	5.1	3.8	21	8.9	5.2	4.6	5.2	4.6
AC-FT	654	1070	4190	5780	2750	2060	2350	861	499	651	619	484

CAL YR 1979 TOTAL 9458.0 MEAN 25.9 MAX 171 MIN 4.3 AC-FT 18760
WTR YR 1980 TOTAL 11072.5 MEAN 30.3 MAX 246 MIN 3.8 AC-FT 21960

14198500 MOLALLA RIVER ABOVE PINE CREEK, NEAR WILHOIT, OR

LOCATION.--Lat 45°00'35", long 122°28'45", in NE¼NE¼ sec.31, T.6 S., R.3 E., Clackamas County, Hydrologic Unit 17090009, on right bank 0.5 mi (0.8 km) upstream from Pine Creek, 5 mi (8 km) southeast of Wilhoit, and at mile 32.5 (52.3 km).

DRAINAGE AREA.--97.0 mi² (251.2 km²), at gaging cable 0.2 mi (0.3 km) downstream.

PERIOD OF RECORD.--October 1935 to current year.

REVISED RECORDS.--WSP 1738: Drainage area. WDR OR-75-1: 1967(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 791.35 ft (241.203 m) National Geodetic Vertical Datum of 1929 (Bureau of Public Roads bench mark). Oct. 1, 1935, to Sept. 30, 1945, and Oct. 1, 1945, to Feb. 9, 1961, water-stage recorder at site 0.3 mi (0.5 km) downstream at datums 8.42 ft (2.566 m) and 10.44 ft (3.182 m) lower, respectively. Feb. 10, 1961, to July 21, 1966, water-stage recorder at site 0.2 mi (0.3 km) downstream at datum 5.99 ft (1.826 m) lower.

REMARKS.--Records good. No regulation or diversion above station. Records given herein are for measuring site.

AVERAGE DISCHARGE.--45 years, 545 ft³/s (15.43 m³/s), 76.30 in/yr (1,938 mm/yr), 394,900 acre-ft/yr (487 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,300 ft³/s (688 m³/s) Dec. 22, 1964, gage height, 16.3 ft (4.97 m), from floodmark, site and datum then in use, from rating curve extended above 5,200 ft³/s (147 m³/s); minimum, 18 ft³/s (0.51 m³/s) Oct. 3, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,600 ft³/s (102 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 2	0930	4,840	137	8.17	2.490	Jan. 12	1330	*8,980	254	*10.38	3.164

Minimum, 24 ft³/s (0.68 m³/s) Oct. 1-5, 8-14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	354	381	834	447	676	367	381	292	123	52	46
2	26	292	3370	759	841	558	341	350	312	118	52	72
3	27	250	2300	773	1290	488	333	320	358	112	52	56
4	26	341	2860	689	806	498	337	300	345	120	51	45
5	27	520	2010	1340	616	575	536	292	304	118	49	40
6	27	418	1260	1060	806	587	766	270	277	112	49	39
7	27	324	912	786	799	530	634	250	270	103	48	38
8	26	270	708	773	652	478	658	230	260	99	43	38
9	27	233	664	1410	541	418	1470	230	233	97	46	35
10	25	205	799	1000	467	399	1350	236	208	97	44	34
11	25	181	622	876	404	488	1080	233	199	90	44	34
12	24	165	558	5730	358	483	985	223	196	90	39	34
13	25	152	488	6170	328	664	1150	208	288	86	43	41
14	29	142	457	5890	304	1020	1350	202	345	82	38	38
15	48	134	478	3170	281	766	1400	199	312	82	40	38
16	35	200	462	1890	267	587	1110	196	288	79	39	34
17	37	300	442	1500	263	575	1040	181	263	74	41	34
18	110	450	442	1080	337	727	905	176	236	75	39	37
19	575	310	488	834	634	695	898	170	208	72	44	43
20	683	250	640	670	634	714	956	165	199	69	37	95
21	498	200	1160	564	520	652	993	157	184	69	40	112
22	358	300	1040	483	447	569	813	181	173	65	39	74
23	604	450	876	437	437	564	708	208	168	64	39	62
24	409	700	926	428	404	509	664	214	162	62	38	49
25	616	1200	753	395	413	467	616	399	176	61	38	49
26	820	750	616	350	869	472	569	689	162	59	37	43
27	786	493	520	288	813	442	558	670	147	58	37	43
28	604	418	452	270	883	404	581	525	139	58	38	43
29	478	354	409	256	841	413	514	399	134	55	38	41
30	409	341	381	253	---	428	428	341	127	55	37	41
31	447	---	395	243	---	399	---	288	---	53	45	---
TOTAL	7885	10697	27869	41201	16702	17245	24110	8883	6965	2557	1316	1428
MEAN	254	357	899	1329	576	556	804	287	232	82.5	42.5	47.6
MAX	820	1200	3370	6170	1290	1020	1470	689	358	123	52	112
MIN	24	134	381	243	263	399	333	157	127	53	37	34
CFSM	2.62	3.68	9.27	13.7	5.94	5.73	8.29	2.96	2.39	.85	.44	.49
IN.	3.02	4.10	10.69	15.80	6.41	6.61	9.25	3.41	2.67	.98	.50	.55
AC-FT	15640	21220	55280	81720	33130	34210	47820	17620	13820	5070	2610	2830

CAL YR 1979	TOTAL 166119	MEAN 455	MAX 5000	MIN 24	CFSM 4.69	IN 63.71	AC-FT 329500			
WTR YR 1980	TOTAL 166858	MEAN 456	MAX 6170	MIN 24	CFSM 4.70	IN 63.99	AC-FT 331000			

14201500 BUTTE CREEK AT MONITOR, OR

LOCATION.--Lat 45°06'06", long 122°44'42", in SE¼SE¼ sec.25, T.5 S., R.1 W., Marion County, Hydrologic Unit 17090009, on left bank at downstream side of highway bridge at Monitor and at mile 7.7 (12.4 km).

DRAINAGE AREA.--58.7 mi² (152.0 km²).

PERIOD OF RECORD.--January to December 1936, October 1940 to September 1952, October 1966 to current year. Monthly discharge only for January to December 1936, published is WSP 1318.

REVISED RECORDS.--WSP 2135: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 155 ft (47.2 m) from topographic map. Jan. 20 to Oct. 22, 1936, nonrecording gage at present site at different datum. Oct. 23 to Dec. 19, 1936, nonrecording gage at site 70 ft (21 m) downstream at different datum. Oct. 1, 1940, to Sept. 30, 1952, nonrecording gage at present site at 151.35 ft (46.131 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. No regulation. Diversions for irrigation by pumping above station.

AVERAGE DISCHARGE.--26 years (water years 1941-52, 1967-80), 221 ft³/s (6.259 m³/s), 51.13 in/yr (1,299 mm/yr), 160,100 acre-ft/yr (197 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,310 ft³/s (207 m³/s) Jan. 21, 1972, gage height, 15.26 ft (4.651 m), from floodmark; minimum, 0.15 ft³/s (0.004 m³/s) Aug. 25, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s (42.5 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 4	1230	2,050	58.1	8.98	2.737	Jan. 14	1330	*4,460	126	*12.02	3.664
Jan. 9	1300	1,780	51.8	8.37	2.551						

Minimum, 1.5 ft³/s (0.042 m³/s) Aug. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	95	150	274	173	235	159	130	78	29	3.8	6.4
2	5.1	84	1200	258	293	207	146	119	83	28	4.3	12
3	4.7	77	954	300	479	187	138	110	94	29	5.5	15
4	4.7	102	1330	285	342	191	134	102	88	36	4.9	8.7
5	4.5	152	919	627	278	207	184	94	80	38	4.3	6.4
6	4.7	130	608	504	313	222	331	90	76	31	4.7	6.4
7	5.3	105	449	382	293	203	331	85	74	26	4.2	7.2
8	5.3	90	362	445	260	189	305	81	74	22	4.2	6.4
9	5.5	78	313	1360	229	171	493	85	67	21	3.3	5.7
10	5.3	71	356	944	205	164	642	90	62	21	3.4	4.9
11	5.1	65	274	694	185	235	504	88	58	20	3.1	4.5
12	4.9	60	251	2420	168	227	413	80	57	18	2.4	5.7
13	4.9	55	224	3170	152	337	379	76	87	17	3.0	6.9
14	5.7	51	207	3410	140	842	394	73	100	15	3.7	8.1
15	10	48	195	1920	130	623	400	71	84	14	3.4	7.2
16	10	53	178	1240	119	469	331	72	76	13	3.5	6.7
17	8.4	78	176	1010	120	432	295	65	74	12	4.2	6.2
18	12	148	203	719	142	479	264	60	67	11	4.0	7.8
19	97	117	201	544	193	410	267	56	61	9.3	3.3	10
20	164	99	231	422	203	394	318	55	58	11	3.7	19
21	148	88	397	348	182	356	426	54	56	9.3	3.8	26
22	88	161	407	295	166	316	351	68	52	8.4	4.3	16
23	120	326	391	255	176	288	300	77	50	6.9	4.3	12
24	94	331	426	227	162	258	271	71	50	7.8	3.8	10
25	132	407	345	203	157	235	240	84	52	7.8	3.7	9.3
26	178	351	288	185	258	233	220	110	51	7.5	3.3	8.7
27	209	262	244	155	253	214	199	124	44	7.2	4.0	8.4
28	184	201	214	144	285	191	185	103	39	5.9	3.7	8.7
29	142	173	191	124	270	187	168	91	36	4.9	3.7	8.4
30	117	159	180	119	---	180	146	83	32	4.9	3.5	8.7
31	119	---	187	113	---	171	---	74	---	4.5	5.7	---
TOTAL	1903.4	4217	12051	23096	6326	9053	8934	2621	1960	496.4	120.7	277.4
MEAN	61.4	141	389	745	218	292	298	84.5	65.3	16.0	3.89	9.25
MAX	209	407	1330	3410	479	842	642	130	100	38	5.7	26
MIN	4.5	48	150	113	119	164	134	54	32	4.5	2.4	4.5
CFSM	1.05	2.40	6.63	12.7	3.71	4.97	5.08	1.44	1.11	.27	.07	.16
IN.	1.21	2.67	7.64	14.64	4.01	5.74	5.66	1.66	1.24	.31	.08	.18
AC-FT	3780	8360	23900	45810	12550	17960	17720	5200	3890	985	239	550

CAL YR 1979	TOTAL	65353.9	MEAN 179	MAX 1950	MIN 2.1	CFSM 3.05	IN 41.42	AC-FT 129600		
WTR YR 1980	TOTAL	71055.9	MEAN 194	MAX 3410	MIN 2.4	CFSM 3.31	IN 45.03	AC-FT 140900		

14202500 TUALATIN RIVER NEAR GASTON, OR

LOCATION.--Lat 45°26'11", long 123°10'07", in SE¼SW¼ sec.34, T.1 S., R.4 W., Washington County, Hydrologic Unit 17090010, on right bank 1.5 mi (2.4 km) west of Gaston, and at mile 63.9 (102.8 km).

DRAINAGE AREA.--48.5 mi² (125.6 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1940 to September 1956, October 1972 to September 1976, October 1978 to current year. October 1976 to September 1978 in reports of Oregon Water Resources Department. Prior to October 1973 published as "at Gaston."

GAGE.--Water-stage recorder. Altitude of gage is 170 ft (52 m), by barometer. Prior to May 20, 1942, water-stage recorder at site 1.5 mi (2.4 km) downstream at datum 164.18 ft (50.042 m) National Geodetic Vertical Datum of 1929. May 20, 1942, to Sept. 30, 1956, nonrecording gage at present site at different datum.

REMARKS.--Water-discharge records good except those for periods of no gage-height record Jan. 3-14, Jan. 27 to Mar. 17 and May 1-8, which are fair. Slight diurnal fluctuation caused by logponds upstream. Small diversions for irrigation above station. In 1949 city of Hillsboro began diverting about 5 ft³/s (0.14 m³/s) for municipal supply. Some water is diverted from Roaring Creek upstream for Forest Grove municipal supply.

AVERAGE DISCHARGE.--22 years (water years 1941-56, 1973-76, 1979-80), 197 ft³/s (5.579 m³/s), 55.16 in/yr (1,401 mm/yr), 142,700 acre-ft/yr (176 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,170 ft³/s (231 m³/s) Dec. 21, 1955, gage height, 13.18 ft (4.017 m), site and datum then in use; minimum, 0.20 ft³/s (0.006 m³/s) Sept. 22, 23, 1951, Aug. 14, 15, Sept. 25, Oct. 8, 1952.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,000 ft³/s (56.6 m³/s) and maximum discharge, 3,050 ft³/s (86.4 m³/s) Jan. 12, gage height, 16.24 ft (4.950 m), from floodmark; minimum, 5.8 ft³/s (0.16 m³/s) Aug. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	77	99	717	200	380	177	90	35	19	12	14
2	12	60	675	512	360	340	163	85	35	19	13	16
3	11	68	346	400	440	300	154	85	34	20	14	15
4	11	92	557	380	400	260	154	80	35	29	13	14
5	11	125	387	420	360	230	188	75	33	23	13	13
6	11	97	266	380	550	210	276	72	33	20	14	13
7	11	74	207	360	600	190	274	70	33	18	13	13
8	11	59	171	340	450	180	281	68	33	17	12	13
9	11	48	157	500	360	170	456	70	31	17	12	12
10	11	42	159	550	320	170	450	68	30	18	11	11
11	11	37	137	500	280	190	350	63	27	19	10	11
12	11	33	214	1700	250	240	294	60	28	19	9.5	12
13	10	31	209	1500	220	320	251	59	33	18	9.5	13
14	11	29	236	1300	200	340	240	57	38	17	10	14
15	14	27	368	1000	190	360	236	55	33	18	12	14
16	13	27	285	1030	180	340	211	57	30	16	14	12
17	13	28	300	865	180	320	192	51	30	16	14	11
18	23	45	537	637	380	320	177	48	29	16	19	12
19	59	61	521	480	420	323	173	45	27	16	19	14
20	59	52	614	387	380	331	203	44	29	17	13	18
21	33	42	788	329	320	329	181	45	28	15	12	17
22	27	89	580	296	280	294	167	48	25	15	11	13
23	55	233	496	261	260	270	157	49	25	15	7.5	11
24	65	227	515	238	240	251	141	48	31	12	7.8	10
25	120	227	418	220	300	233	131	45	44	13	11	9.8
26	91	188	357	201	460	227	124	49	40	13	11	9.2
27	135	146	312	180	500	227	114	47	31	13	11	8.9
28	92	116	270	170	500	209	107	41	26	13	13	9.8
29	63	99	245	160	440	201	102	39	21	12	13	11
30	65	82	229	150	---	196	97	37	20	12	14	10
31	111	---	446	140	---	190	---	36	---	12	15	---
TOTAL	1193	2561	11101	16303	10020	8141	6221	1786	927	517	383.3	374.7
MEAN	38.5	85.4	358	526	346	263	207	57.6	30.9	16.7	12.4	12.5
MAX	135	233	788	1700	600	380	456	90	44	29	19	18
MIN	10	27	99	140	180	170	97	36	20	12	7.5	8.9
CFSM	.79	1.76	7.38	10.8	7.13	5.42	4.27	1.19	.64	.34	.26	.26
IN.	.92	1.96	8.51	12.50	7.69	6.24	4.77	1.37	.71	.40	.29	.29
AC-FT	2370	5080	22020	32340	19870	16150	12340	3540	1840	1030	760	743

CAL YR 1979 TOTAL 49654.3 MEAN 136 MAX 1300 MIN 9.2 CFSM 2.80 IN 38.08 AC-FT 98490
WTR YR 1980 TOTAL 59528.0 MEAN 163 MAX 1700 MIN 7.5 CFSM 3.36 IN 45.66 AC-FT 118100

14202500 TUALATIN RIVER NEAR GASTON, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: December 1978 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 25.5°C July 21, 1980; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 25.5°C July 21; minimum, 0.0°C Jan. 27-31.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	PH FIELD (UNITS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SILICA, DIS-SOLVED (MG/L AS SIO2)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)
MAY											
27...	1700	47	14.0	7.4	77	35	6.6	3.5	4.5	.5	29
JUN											
07...	1000	32	12.2	7.7	84	18	7.9	2.5	4.2	.4	29
12...	0900	27	12.6	7.0	88	17	7.6	2.4	3.6	.3	33
14...	1000	38	11.4	6.6	108	18	9.5	2.9	5.1	.7	23
19...	1000	27	13.4	6.4	88	19	8.7	2.5	4.7	.4	35
26...	0900	44	11.0	6.5	93	18	8.1	2.5	4.5	.6	30
JUL											
03...	0900	18	14.8	7.6	100	19	11	2.7	5.1	.4	44
11...	1000	19	15.4	7.4	99	19	9.3	2.7	4.9	.4	32

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, TOTAL (MG/L AS P)
MAY											
27...	1.0	4.3	.0	.68	.10	.67	.030	.07	.77	.000	.030
JUN											
07...	1.3	5.0	.0	.53	.10	.99	.010	.10	1.1	.000	.020
12...	.7	4.9	.1	.39	.04	--	--	.04	--	.000	.000
14...	2.8	10	.2	.47	.08	.30	.070	.95	1.3	.010	.080
19...	.8	6.1	.1	.52	.03	.77	.060	.04	.87	.020	.030
26...	1.3	6.4	.1	.23	.04	1.6	.020	.02	1.6	.340	.380
JUL											
03...	3.1	7.0	.1	.49	.00	1.1	.030	.00	1.1	.010	.030
11...	4.0	6.5	.1	.33	.04	.49	.010	.02	.52	.220	.090

DATE	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	TUR-BID-ITY (NTU)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
MAY										
27...	1.8	.2	31	2	56	73	1.8	--	--	--
JUN										
07...	1.5	.1	30	1	59	57	1.3	5	.43	39
12...	1.4	--	29	0	58	57	2.5	4	.29	34
14...	1.4	.3	36	13	75	64	72	106	11	98
19...	1.0	.1	32	0	69	64	4.0	11	.81	98
26...	2.6	.2	31	1	64	60	1.0	8	.95	79
JUL										
03...	.7	.1	39	0	70	75	3.4	--	--	--
11...	1.2	--	34	2	82	66	1.7	5	.25	88

14202500 TUALATIN RIVER NEAR GASTON, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BORON, DIS-SOLVED (UG/L AS B)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
MAY										
27...	1	1	20	<100	--	--	2	0	0	0
JUN										
07...	0	1	10	<100	--	--	2	0	0	0
12...	1	1	10	<100	10	50	2	1	0	0
14...	2	1	10	<100	10	70	2	1	0	0
19...	1	1	10	<100	--	--	<1	1	0	0
26...	1	1	7	<100	--	--	3	1	0	0
JUL										
03...	1	2	10	<100	--	--	<1	1	10	10
11...	1	2	9	<100	--	--	1	0	0	10

DATE	COBALT, DIS-SOLVED (UG/L AS CO)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
MAY									
27...	<3	0	12	10	40	320	7	5	2
JUN									
07...	<3	0	4	13	80	310	4	11	20
12...	<3	0	<10	3	76	570	15	0	19
14...	<3	0	<10	7	50	1000	<10	5	25
19...	<3	0	4	8	90	1800	3	4	30
26...	<3	0	4	8	70	1000	0	2	20
JUL									
03...	<3	0	2	8	120	350	1	8	30
11...	<3	0	3	15	90	320	3	6	20

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SILVER, DIS-SOLVED (UG/L AS AG)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)
MAY									
27...	30	9	<10	0	0	4	10	--	--
JUN									
07...	30	0	8	0	0	8	30	--	--
12...	50	0	3	0	0	<3	210	40	110
14...	50	0	5	0	0	<3	60	30	1000
19...	30	4	<10	0	0	<3	20	--	--
26...	40	3	7	0	0	7	110	--	--
JUL									
03...	30	1	7	0	0	10	20	--	--
11...	30	3	3	0	0	9	10	--	--

DATE	LITHIUM DIS-SOLVED (UG/L AS LI)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SELE-NIUM, TOTAL (UG/L AS SE)	MERCURY DIS-SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)
MAY									
27...	--	--	0	0	.0	.0	--	--	--
JUN									
07...	--	--	0	0	.0	.0	--	--	--
12...	<4	0	0	0	.0	.0	<1	31	<6.0
14...	<4	0	0	0	.0	.0	<1	40	<6.0
19...	--	--	0	0	.0	.0	--	--	--
26...	--	--	0	0	.0	.0	--	--	--
JUL									
03...	--	--	0	0	.0	.0	--	--	--
11...	--	--	0	0	.0	.7	--	--	--

14202500 TUALATIN RIVER NEAR GASTON, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	16.0	13.0	8.5	6.5	5.5	5.0	8.0	7.5	2.5	.5	8.0	7.0
2	16.0	13.5	9.0	8.0	7.5	5.5	8.0	7.0	4.0	2.5	9.0	7.5
3	16.0	13.5	10.5	9.0	8.5	7.5	7.0	6.5	6.0	4.5	8.5	8.0
4	16.0	13.5	10.5	9.5	9.0	7.5	7.0	7.0	5.5	4.5	9.0	7.5
5	16.0	13.5	11.0	9.5	8.0	7.0	7.0	5.5	5.5	5.0	8.0	7.0
6	15.5	14.0	10.5	9.0	8.0	7.5	5.5	4.0	6.5	5.5	8.0	6.5
7	16.0	14.5	9.5	8.0	8.5	7.5	4.5	4.0	6.5	5.5	8.5	6.5
8	16.0	14.0	8.0	6.5	7.5	7.0	6.0	4.0	6.0	5.0	8.5	6.5
9	15.5	13.0	8.0	6.0	8.0	7.5	5.5	4.5	5.5	4.5	8.0	5.5
10	14.5	12.5	8.5	6.5	7.5	5.5	5.5	5.0	6.0	4.5	8.0	7.0
11	14.5	12.0	8.0	6.0	5.5	5.0	---	---	5.5	4.0	7.5	6.0
12	13.5	12.0	6.5	4.5	6.5	5.5	---	---	5.0	3.5	6.0	5.0
13	13.0	12.0	5.5	4.0	7.5	6.5	---	---	4.5	3.5	7.0	5.5
14	14.0	12.5	5.0	3.5	8.0	7.5	---	---	4.5	3.0	6.5	6.0
15	15.0	13.0	5.5	3.0	9.0	8.0	---	---	3.5	2.5	6.0	4.5
16	14.5	13.0	6.5	5.5	8.0	6.5	---	---	5.0	3.5	7.0	5.5
17	13.0	10.0	7.5	6.5	8.5	6.5	---	---	5.0	4.0	7.5	6.0
18	12.5	11.0	7.5	6.5	9.0	8.5	---	---	6.5	5.0	7.5	5.5
19	11.5	10.0	6.5	6.0	9.0	9.0	5.5	4.0	7.0	6.0	8.5	6.5
20	10.5	9.5	6.0	5.0	9.0	8.5	5.0	4.5	7.0	6.0	8.5	7.0
21	10.0	8.5	5.0	3.0	8.5	8.5	5.5	4.5	6.5	5.0	8.0	5.5
22	11.0	9.0	6.0	4.5	8.5	6.5	5.5	4.5	6.5	5.5	8.5	5.5
23	12.0	10.5	7.0	6.0	6.5	4.5	5.5	4.5	7.5	6.5	8.5	6.0
24	11.0	10.5	7.5	7.0	7.0	5.5	5.5	4.5	7.5	6.5	8.5	5.5
25	12.0	11.0	7.0	6.0	7.0	6.5	6.0	5.0	7.5	7.0	9.0	6.0
26	11.5	10.5	6.0	5.5	7.5	6.5	5.0	2.0	8.0	7.5	9.0	7.0
27	12.0	10.5	6.0	5.0	6.5	5.5	2.0	.0	9.0	8.0	8.5	5.5
28	10.5	9.0	5.0	4.0	6.5	5.5	.0	.0	9.0	8.0	8.5	6.5
29	9.0	7.5	5.5	4.5	7.5	6.0	.0	.0	8.0	7.0	9.5	7.0
30	9.0	8.5	6.0	5.5	6.5	6.0	.0	.0	---	---	8.5	6.0
31	9.5	8.0	---	---	7.5	6.5	.5	.0	---	---	8.0	6.5
MONTH	16.0	7.5	11.0	3.0	9.0	4.5	8.0	.0	9.0	.5	9.5	4.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.5	5.5			---	---	21.5	16.0	22.0	18.0	16.5	14.0
2	10.0	5.5			---	---	20.5	16.5	21.0	18.0	16.5	15.5
3	9.0	6.0			---	---	17.5	14.5	21.0	17.0	17.0	12.5
4	10.0	7.5			---	---	16.0	13.0	20.5	17.0	18.5	14.5
5	9.5	8.0			---	---	17.5	14.0	19.5	16.5	19.5	16.0
6	---	---			---	---	21.0	15.0	20.0	14.5	18.5	16.0
7	---	---			---	---	23.0	17.0	22.0	17.0	19.0	17.0
8	---	---			---	---	23.0	18.5	22.5	18.5	19.0	15.5
9	---	---			---	---	22.0	17.0	23.0	18.5	19.5	16.0
10	---	---			---	---	19.5	14.5	23.0	19.5	20.5	17.5
11	---	---			---	---	19.5	16.0	23.5	20.0	19.0	17.0
12	---	---			---	---	20.0	16.0	22.5	19.0	18.5	17.0
13	---	---			---	---	21.0	16.5	22.0	18.5	17.0	14.0
14	---	---			---	---	20.0	17.5	21.0	18.0	16.5	13.5
15	---	---			---	---	22.5	16.5	19.0	16.5	17.5	14.0
16	---	---			---	---	22.0	17.5	21.5	17.0	18.0	15.0
17	---	---			---	---	21.5	17.0	20.5	17.5	18.0	15.5
18	---	---			18.0	13.5	22.5	18.0	20.0	16.5	17.5	15.0
19	---	---			19.5	13.5	21.0	18.0	20.0	15.0	15.0	14.0
20	---	---			18.5	15.5	23.5	17.0	20.0	16.0	15.0	13.5
21	---	---			16.0	13.5	25.5	19.5	19.5	16.0	14.5	12.5
22	---	---			17.0	13.0	24.5	20.5	20.0	16.5	14.5	11.5
23	---	---			17.5	13.5	23.5	17.0	21.0	17.0	16.0	14.5
24	---	---			16.5	13.5	23.0	18.5	20.5	17.5	16.0	14.5
25	---	---			15.0	12.0	23.0	18.5	20.5	16.5	16.5	14.0
26	---	---			15.0	11.0	24.0	19.0	19.0	16.5	16.5	15.0
27	---	---			17.0	12.5	25.0	20.5	18.0	16.0	16.0	14.5
28	---	---			19.0	13.0	24.5	20.5	17.0	14.0	15.5	14.5
29	---	---			19.5	14.0	23.0	19.0	17.5	13.5	15.5	13.5
30	---	---			20.5	14.5	23.0	18.5	17.0	15.0	16.0	15.0
31	---	---			---	---	22.5	19.0	16.5	14.5	---	---
MONTH	10.0	5.5			20.5	11.0	25.5	13.0	23.5	13.5	20.5	11.5

14202965 HENRY HAGG LAKE NEAR GASTON, OR

LOCATION.--Lat 45°28'25", long 123°11'51", in SE¼NE¼ sec.20, T.1 S., R.4 W., Washington County, Hydrologic Unit 17090010, at left end of Scoggins Dam on Scoggins Creek, 3.8 mi (6.1 km) northwest of Gaston, and at mile 4.9 (7.9 km).

DRAINAGE AREA.--38.7 mi^2 (100.2 km^2).

PERIOD OF RECORD.--January 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Bureau of Reclamation).

REMARKS.--Reservoir is formed by earthfill dam with gated concrete spillway and a gated outlet tunnel. Storage began in January 1975. Total capacity at elevation 305.7 ft (93.18 m), maximum water-surface elevation, is 63,360 acre-ft (78.1 hm^3), of which 56,160 acre-ft (69.2 hm^3) is active storage above elevation 239.3 ft (72.94 m), proposed minimum pool. Reservoir is used for irrigation, flood control, and recreation. Figures given herein represent active storage.

COOPERATION.--Capacity table and monthend elevations furnished by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 53,660 acre-ft (66.2 hm^3) Apr. 30, 1975, elevation, 303.52 ft (92.513 m); minimum observed since first filling, 808 acre-ft (1.00 hm^3) Oct. 31, 1975, elevation, 237.21 ft (72.302 m).

EXTREMES FOR CURRENT YEAR.--Maximum monthend contents, 52,240 acre-ft (64.4 hm^3) May 31, elevation, 302.26 ft (92.129 m); minimum monthend, 23,630 acre-ft (29.1 hm^3) Nov. 30, elevation, 272.91 ft (83.183 m).

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept.30	282.50	32,100	-
Oct. 31	273.20	23,880	-8,220
Nov. 30	272.91	23,630	-250
Dec. 31	278.07	28,080	+4,450
CAL YR 1979	-	-	+550
Jan. 31	287.76	37,110	+9,030
Feb. 29	298.86	48,500	+11,390
Mar. 31	300.20	49,960	+1,460
Apr. 30	302.16	52,130	+2,170
May 31	302.26	52,240	+110
June 30	301.28	51,150	-1,090
July 31	296.63	46,110	-5,040
Aug. 31	288.69	38,020	-8,090
Sept.30	281.03	30,750	-7,270
WTR YR 1980	-	-	-1,350

14202980 SCOGGINS CREEK BELOW HENRY HAGG LAKE, NEAR GASTON, OR

LOCATION.--Lat 45°28'10", long 123°11'56", in SE¼NE¼ sec.20, T.1 S., R.4 W., Washington County, Hydrologic Unit 17090010, on left bank 600 ft (183 m) downstream from Scoggins Dam, 800 ft (244 m) upstream from small left bank tributary, 3.7 mi (6.0 km) northwest of Gaston, and at mile 4.8 (7.7 km).

DRAINAGE AREA.--38.8 mi^2 (100.5 km^2).

PERIOD OF RECORD.--January 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is 187.48 ft (57.144 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records excellent except those below 25 ft^3/s (0.71 m^3/s), which are fair. Flow completely regulated by Henry Hagg Lake since January 1975. Discharge not adjusted for storage or release from Henry Hagg Lake as evaporation from reservoir at times exceeds natural flow.

AVERAGE DISCHARGE.--5 years, 88.1 ft^3/s (2.495 m^3/s), 68,830 acre-ft (78.7 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,250 ft^3/s (35.4 m^3/s) Dec. 16, 1977, gage height, 13.50 ft (4.115 m); minimum, 1.4 ft^3/s (0.040 m^3/s) Nov. 16, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 538 ft^3/s (15.2 m^3/s) Jan. 20, gage height, 8.82 ft (2.688 m); minimum, 5.6 ft^3/s (0.16 m^3/s) Dec. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	141	103	26	84	22	22	57	47	29	26	128	116
2	142	33	26	135	22	22	81	47	30	26	128	93
3	141	33	79	194	22	22	75	47	29	25	127	43
4	143	32	153	174	22	61	61	47	29	25	127	96
5	144	68	164	150	22	101	57	47	29	25	128	124
6	143	89	177	150	22	112	106	47	29	25	128	123
7	143	89	173	97	22	126	160	47	29	60	123	123
8	142	55	150	65	22	135	160	47	29	81	122	123
9	142	31	150	87	22	135	212	47	29	81	122	123
10	142	31	74	121	22	135	249	47	30	81	122	123
11	142	31	19	170	22	164	179	47	29	80	118	123
12	142	31	19	202	22	197	133	47	29	80	117	123
13	141	28	19	206	22	222	133	47	76	80	122	123
14	141	27	19	205	22	255	136	38	113	79	131	123
15	144	26	19	205	22	274	139	34	111	79	126	123
16	142	26	19	206	22	272	108	34	68	75	116	123
17	139	26	66	205	22	289	92	34	55	68	116	122
18	139	26	101	224	22	310	83	34	66	73	115	123
19	139	26	102	349	23	326	73	35	40	77	115	123
20	139	26	179	505	22	329	73	35	40	77	115	122
21	138	26	239	528	22	300	64	35	40	87	116	123
22	147	26	245	526	22	264	51	35	40	97	115	123
23	154	26	248	527	22	263	46	35	40	97	116	122
24	167	38	298	517	22	160	46	35	30	105	116	122
25	187	105	331	506	22	61	46	35	26	119	103	132
26	205	158	366	498	22	49	46	35	26	128	117	136
27	209	168	386	486	22	49	46	35	26	128	118	136
28	208	167	384	261	23	50	47	35	26	128	117	135
29	207	106	316	59	23	49	47	35	26	128	117	95
30	174	36	221	33	---	50	47	30	26	128	117	23
31	173	---	140	22	---	59	---	28	---	128	117	---
TOTAL	4800	1693	4908	7697	641	4863	2853	1228	1225	2496	3715	3462
MEAN	155	56.4	158	248	22.1	157	95.1	39.6	40.8	80.5	120	115
MAX	209	168	386	528	23	329	249	47	113	128	131	136
MIN	138	26	19	22	22	22	46	28	26	25	103	23
AC-FT	9520	3360	9740	15270	1270	9650	5660	2440	2430	4950	7370	6870

CAL YR 1979 TOTAL 31603 MEAN 86.6 MAX 539 MIN 13 AC-FT 62680
WTR YR 1980 TOTAL 39581 MEAN 108 MAX 528 MIN 19 AC-FT 78510

14203500 TUALATIN RIVER NEAR DILLEY, OR

LOCATION.--Lat 45°28'30", long 123°07'23", in NE¼NW¼ sec.24, T.1 S., R.4 W., Washington County, Hydrologic Unit 17090010, on left bank 5 ft (2 m) upstream from highway bridge, 1.0 mi (1.6 km) south of Dilley, 1.2 mi (1.9 km) downstream from Scoggins Creek, and at mile 58.81 (94.63 km).

DRAINAGE AREA.--125 mi² (324 km²).

PERIOD OF RECORD.--October 1939 to current year. Prior to October 1940 monthly discharge only, published in WSP 1318.

REVISED RECORDS.--WSP 1935: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 147.57 ft (44.979 m) National Geodetic Vertical Datum of 1929. Prior to June 16, 1950, nonrecording gage at several sites within 200 ft (61 m) of present site at datum 4.00 ft (1.219 m) higher. June 16, 1950, to Aug. 10, 1966, water-stage recorder at present site at datum 4.00 ft (1.219 m) higher.

REMARKS.--Records good. Diurnal fluctuation caused by operation of millpond on Scoggins Creek above station and regulation by Henry Hagg Lake since January 1975. Diversions above station of approximately 3,000 acre-ft (3.70 hm³) from J.W. Barney Reservoir on the Middle Fork of North Fork Trask River for municipal water supply and irrigation in Wapato Lake area.

AVERAGE DISCHARGE.--41 years, 400 ft³/s (11.33 m³/s), 289,800 acre-ft/yr (357 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,100 ft³/s (484 m³/s) Dec. 22, 1964, gage height, 19.34 ft (5.895 m), from rating curve extended above 6,000 ft³/s (170 m³/s); minimum, 0.08 ft³/s (0.002 m³/s) Sept. 3, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,620 ft³/s (103 m³/s) Jan. 12, gage height, 18.05 ft (5.502 m); minimum, 38 ft³/s (1.08 m³/s) July 2, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	162	273	182	972	260	593	274	180	70	40	142	137
2	164	145	609	938	421	527	288	171	71	39	142	133
3	162	140	606	876	573	462	280	163	68	41	144	60
4	159	156	692	780	514	429	258	157	67	52	143	94
5	162	214	743	836	472	461	280	151	65	50	140	143
6	165	244	616	761	568	475	408	147	64	46	141	141
7	166	219	529	653	664	444	522	140	64	65	138	142
8	166	176	439	565	568	431	520	131	67	102	134	144
9	167	123	394	924	468	406	652	145	64	101	134	143
10	166	111	355	1070	397	396	787	150	62	102	134	142
11	165	103	243	986	357	423	741	138	59	102	133	143
12	165	95	281	2360	325	516	606	132	57	103	128	145
13	165	88	293	3450	300	736	540	129	86	105	128	147
14	165	81	293	3110	277	802	496	123	176	104	137	149
15	171	79	421	2520	260	868	483	111	167	103	137	149
16	170	76	366	2120	248	858	429	109	130	99	130	146
17	167	75	356	1900	254	822	376	97	79	84	131	145
18	172	85	637	1370	501	832	346	95	122	84	136	149
19	212	106	707	1190	703	802	326	92	71	91	141	151
20	212	103	800	1170	604	784	375	88	68	91	131	153
21	193	92	1200	1120	511	771	354	90	69	93	130	150
22	187	124	1180	1070	436	697	313	93	62	109	128	141
23	217	318	1090	1020	391	646	286	100	67	107	127	141
24	236	341	1200	963	367	568	267	96	67	118	127	141
25	309	416	1150	908	372	411	251	90	78	130	119	146
26	310	453	1040	850	592	360	236	94	76	142	133	155
27	357	420	974	791	682	351	222	91	64	143	133	154
28	337	368	888	540	706	321	209	81	57	145	133	156
29	304	302	784	340	670	305	198	76	52	141	131	146
30	279	211	632	296	---	296	189	72	46	141	134	52
31	314	---	642	252	---	298	---	69	---	141	136	---
TOTAL	6446	5737	20342	36701	13461	17091	11512	3601	2315	3014	4155	4138
MEAN	208	191	656	1184	464	551	384	116	77.2	97.2	134	138
MAX	357	453	1200	3450	706	868	787	180	176	145	144	156
MIN	159	75	182	252	248	296	189	69	46	39	119	52
AC-FT	12790	11380	40350	72800	26700	33900	22830	7140	4590	5980	8240	8210

CAL YR 1979 TOTAL 98952 MEAN 271 MAX 1650 MIN 46 AC-FT 196300
WTR YR 1980 TOTAL 128513 MEAN 351 MAX 3450 MIN 39 AC-FT 254900

14204500 GALES CREEK NEAR FOREST GROVE, OR

LOCATION.--Lat 45°33'20", long 123°11'10", in SE¼ sec.21, T.1 N., R.4 W., Washington County, Hydrologic Unit 17090010, on left bank 50 ft (15 m) downstream from Roderick road bridge, 0.1 mi (0.2 km) below Kelly Creek, 2.5 mi (4.0 km) southeast of town of Gales Creek, 4.5 mi (7.2 km) northwest of Forest Grove, and at mile 8.7 (14.0 km).

DRAINAGE AREA.--66.1 mi² (171.2 km²).

PERIOD OF RECORD.--October 1940 to September 1956, October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 201.81 ft (61.512 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 13, 1941, at site 1.4 mi (2.3 km) downstream at datum 14.33 ft (4.368 m) lower. Sept. 13, 1941, to June 19, 1952, at downstream side of bridge at datum 1.44 ft (0.439 m) higher. June 20, 1952, to Jan. 3, 1956, at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records good. No regulation. Small diversions for irrigation above station.

AVERAGE DISCHARGE.--26 years, 227 ft³/s (6.429 m³/s), 46.64 in/yr (1,185 mm/yr), 164,500 acre-ft/yr (203 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,410 ft³/s (182 m³/s) Feb. 17, 1949, gage height, 10.90 ft (3.322 m), from floodmark, site and datum then in use; maximum gage height, 12.95 ft (3.947 m), from floodmark, Jan. 21, 1972; minimum discharge, 1 ft³/s (0.028 m³/s) Aug. 19, 1947.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,000 ft³/s (56.6 m³/s) and maximum discharge, 3,360 ft³/s (95.2 m³/s) Jan. 12, gage height, 9.55 ft (2.911 m); minimum, 5.3 ft³/s (0.15 m³/s) Aug. 22, 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.3	75	127	652	228	494	194	120	48	26	9.2	9.7
2	8.8	62	720	549	455	429	182	113	51	24	10	11
3	8.8	82	410	475	563	380	173	110	51	27	11	12
4	8.8	114	679	438	500	340	171	105	52	34	9.7	9.7
5	9.3	130	496	469	463	310	201	100	45	28	9.7	8.8
6	9.3	100	341	400	687	280	288	97	44	25	10	8.3
7	9.8	82	263	354	726	260	292	94	44	23	9.7	9.2
8	9.8	69	210	336	587	240	302	90	45	21	9.7	7.9
9	9.3	59	186	412	480	220	429	95	42	21	8.8	6.7
10	9.3	52	181	346	408	220	477	90	40	23	7.9	6.3
11	9.3	47	162	341	357	230	426	84	39	21	7.5	6.7
12	9.3	43	205	2350	318	380	370	82	39	20	7.5	8.8
13	9.3	41	205	2100	288	520	321	79	42	19	7.5	10
14	12	38	242	1830	263	480	295	79	47	19	7.9	12
15	13	36	336	1420	246	450	272	79	44	20	7.9	12
16	12	36	304	1460	228	430	243	76	38	19	8.8	9.7
17	12	37	438	1250	228	480	221	70	35	18	8.3	8.8
18	23	46	762	927	477	502	203	66	32	16	8.3	9.2
19	47	51	741	720	534	447	210	65	30	15	7.9	13
20	52	45	794	572	480	429	256	62	29	14	7.5	19
21	30	41	879	477	415	397	223	66	32	12	6.7	15
22	28	111	666	413	365	362	203	65	31	11	6.3	15
23	69	193	569	362	328	330	188	66	32	12	5.6	13
24	69	193	594	321	313	302	176	64	39	11	7.1	11
25	122	205	540	297	335	279	165	60	55	10	6.7	10
26	85	182	464	263	618	272	156	58	58	9.7	6.0	9.7
27	128	150	402	237	639	259	146	57	41	8.8	6.3	9.7
28	83	125	341	221	639	239	139	55	36	9.2	7.1	11
29	66	108	304	190	566	228	132	53	31	9.2	7.5	12
30	75	96	282	180	---	214	127	51	29	9.7	8.3	11
31	111	---	464	182	---	205	---	46	---	8.8	10	---
TOTAL	1157.4	2649	13307	20544	12734	10608	7181	2397	1221	544.4	252.4	316.2
MEAN	37.3	88.3	429	663	439	342	239	77.3	40.7	17.6	8.14	10.5
MAX	128	205	879	2350	726	520	477	120	58	34	11	19
MIN	8.8	36	127	180	228	205	127	46	29	8.8	5.6	6.3
CFSM	.56	1.34	6.49	10.0	6.64	5.17	3.62	1.17	.62	.27	.12	.16
IN.	.65	1.49	7.49	11.56	7.17	5.97	4.04	1.35	.69	.31	.14	.18
AC-FT	2300	5250	26390	40750	25260	21040	14240	4750	2420	1080	501	627

CAL YR 1979 TOTAL 56063.3 MEAN 154 MAX 1440 MIN 5.6 CFSM 2.33 IN 31.55 AC-FT 111200
WTR YR 1980 TOTAL 72911.4 MEAN 199 MAX 2350 MIN 5.6 CFSM 3.01 IN 41.03 AC-FT 144600

14207000 OSWEGO CANAL NEAR LAKE OSWEGO, OR

LOCATION.--Lat 45°23'20", long 122°43'10", in NW¼NW¼ sec.20, T.2 S., R.1 E., Clackamas County, Hydrologic Unit 17090010, on left bank 0.4 mi (0.6 km) downstream from point of diversion on Tualatin River, 1.0 mi (1.6 km) upstream from Lake Oswego, and 3.5 mi (5.6 km) southwest of Oswego.

PERIOD OF RECORD.--October 1928 to current year. October 1951 to September 1970, Oswego Canal records were not published separately, but were combined with records for Tualatin River at West Linn.

GAGE.--Water-stage recorder. Datum of gage is 96.50 ft (29.413 m) National Geodetic Vertical Datum of 1929. Prior to nov. 15, 1928, nonrecording gage 800 ft (244 m) upstream at different datum. Nov. 15, 1928, to June 29, 1939, nonrecording gage 900 ft (274 m) downstream at datum about 1.0 ft (0.3 m) higher.

REMARKS.--Records good except those for February, March, May and June, which are fair. Oswego Canal diverts water from Tualatin River in NW¼ sec.20, but diversion dam is in NE¼ sec.33, about 3 mi (5 km) downstream. Water used for recreational facilities and development of power below Lake Oswego and returned to Willamette River at that point.

AVERAGE DISCHARGE.--52 years, 69.0 ft^3/s (1.954 m^3/s), 49,990 acre-ft/yr (61.6 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 6,000 ft^3/s (170 m^3/s) Dec. 23, 1933; no flow at times.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	57	40	28	5.0	2.3	65	58	55	61	59	66
2	75	53	53	14	8.5	2.2	64	55	55	60	58	61
3	70	40	46	2.4	7.4	2.3	63	52	55	59	58	59
4	66	38	46	2.9	6.0	2.1	64	50	55	60	60	56
5	66	41	49	3.6	5.5	2.5	66	55	55	60	62	50
6	65	45	47	3.1	5.8	2.4	80	66	55	61	63	46
7	65	46	44	3.3	4.4	2.2	93	65	55	61	63	46
8	48	42	40	6.4	3.7	2.4	105	63	55	60	63	47
9	46	37	36	12	3.2	1.9	117	65	55	58	63	47
10	54	33	32	6.5	2.8	1.2	132	65	55	58	61	47
11	53	30	24	6.4	2.5	1.4	140	65	70	59	61	46
12	53	27	22	9.2	2.2	2.2	143	63	85	59	62	46
13	52	25	33	10	1.9	3.5	139	60	105	59	61	46
14	49	23	47	12	1.6	3.5	130	58	105	58	60	47
15	38	21	47	7.4	1.7	2.5	119	57	105	59	59	48
16	41	21	49	7.4	1.8	1.7	110	55	84	58	59	50
17	41	21	53	5.9	2.0	1.9	100	55	45	58	60	55
18	43	22	48	5.2	2.5	1.9	91	55	44	57	61	61
19	57	24	40	4.6	2.4	1.8	88	55	44	56	63	66
20	69	25	39	4.3	2.3	2.3	94	55	57	55	64	64
21	72	25	43	3.9	2.1	2.4	109	55	76	59	64	49
22	64	29	44	3.4	2.1	2.3	111	55	74	63	64	47
23	59	44	43	3.8	2.4	2.3	102	55	74	61	64	45
24	56	72	40	3.8	2.4	2.2	92	55	67	58	64	43
25	71	74	40	3.7	2.7	2.2	85	55	62	56	65	42
26	70	52	46	3.5	2.8	2.3	78	55	64	55	65	40
27	63	48	50	3.4	2.7	2.2	73	55	64	57	65	38
28	63	45	49	3.5	2.9	2.1	69	55	63	59	65	39
29	62	40	53	3.5	2.4	2.2	64	55	63	61	65	39
30	57	41	64	3.4	---	2.2	60	55	62	61	65	42
31	58	---	46	3.3	---	36	---	55	---	60	66	---
TOTAL	1820	1141	1353	193.8	95.7	102.6	2846	1777	1963	1826	1932	1478
MEAN	58.7	38.0	43.6	6.25	3.30	3.31	94.9	57.3	65.4	58.9	62.3	49.3
MAX	75	74	64	28	8.5	36	143	66	105	63	66	66
MIN	38	21	22	2.4	1.6	1.2	60	50	44	55	58	38
AC-FT	3610	2260	2680	384	190	204	5650	3520	3890	3620	3830	2930

CAL YR 1979 TOTAL 16042.28 MEAN 44.0 MAX 96 MIN .98 AC-FT 31820
WTR YR 1980 TOTAL 16528.10 MEAN 45.2 MAX 143 MIN 1.2 AC-FT 32780

14207500 TUALATIN RIVER AT WEST LINN, OR
(National stream-quality accounting network station)

LOCATION.--Lat 45°21'03", long 122°40'30", in SW¼ sec.34, T.2 S., R.1 E., Clackamas County, Hydrologic Unit 17090010, on left bank 300 ft (90 m) upstream from bridge on State Highway 212, 0.4 mi (0.6 km) west of West Linn city limits, and at mile 1.8 (2.9 km).

DRAINAGE AREA.--706 mi² (1,829 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1928 to current year. Prior to October 1960, published as "near Willamette."

REVISED RECORDS.--WSP 1014: 1943. WSP 1184: 1947. WSP 1248: 1941. WSP 1935: Drainage area. WDR OR-75-1: 1974(M). WDR OR-77-1: 1971-73, 1975, 1976(M).

GAGE.--Water-stage recorder. Datum of gage is 85.61 ft (26.094 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to June 12, 1941, nonrecording gage at datum 1.02 ft (0.311 m) higher.

REMARKS.--Water-discharge records good except those for period of no gage-height record Feb. 29 to Apr. 23, which are poor. October 1951 to September 1970, all records published for this station included the daily flow of Oswego Canal. October 1971 to current year, maximum discharge only includes flow in Oswego Canal. Oswego Canal diverts at point 5.0 mi (8.0 km) above station for development of power between outlet of Lake Oswego and Willamette River. Some regulation in low-water season by flashboards on crest of diversion dam for Oswego Canal and regulation by Henry Hagg Lake since January 1975. Several diversions above station for irrigation.

AVERAGE DISCHARGE.--52 years, 1,521 ft³/s (43.07 m³/s), 29.26 in/yr (743 mm/yr), 1,102,000 acre-ft/yr (1.36 km³/yr), adjusted for diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,300 ft³/s (660 m³/s) Dec. 23, 1933, gage height, 17.72 ft (5.401 m); minimum daily, 0.20 ft³/s (0.006 m³/s) July 30 to Aug. 2, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,700 ft³/s (303 m³/s) Jan. 18, gage height, 12.13 ft (3.697 m); minimum, 70 ft³/s (1.98 m³/s) July 26, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	156	774	917	3600	1480	3200	1400	801	326	187	81	200
2	158	790	1520	4000	1890	3000	1300	752	307	158	79	200
3	161	634	2580	4200	2790	2800	1300	705	359	133	79	200
4	163	609	3240	4000	3070	2600	1400	664	382	135	81	200
5	163	654	3200	3800	3040	2400	1600	599	351	144	87	200
6	163	726	3030	3600	3130	2400	2000	590	318	158	92	200
7	168	752	2820	3400	3150	2300	2200	576	300	161	94	220
8	176	675	2470	3400	3160	2200	2500	552	322	144	95	220
9	181	585	2030	3600	3160	2000	2800	571	370	129	94	220
10	179	487	1770	4000	3050	2000	3000	576	359	129	94	240
11	176	414	1570	5000	2830	2200	3200	580	315	127	89	240
12	176	362	1370	6240	2520	2600	3200	557	187	131	90	240
13	176	333	1270	7200	2190	3400	3000	521	171	127	89	240
14	225	311	1310	8130	1930	3600	2800	495	426	131	84	240
15	304	286	1310	8330	1760	3800	2600	483	491	133	79	240
16	238	268	1390	9300	1620	4000	2400	474	466	125	79	240
17	229	265	1510	10400	1530	4000	2200	450	454	119	79	240
18	245	293	1860	10700	1690	4000	2200	430	374	115	82	240
19	362	340	2530	10100	2400	4000	2000	406	322	100	87	240
20	474	362	3030	9220	2930	3800	2000	386	282	94	89	240
21	512	366	3650	8280	2980	3600	1900	374	216	92	90	250
22	462	434	3950	7450	2870	3400	1800	398	187	92	89	252
23	426	726	4140	6640	2690	3200	1640	474	176	87	85	238
24	418	1160	4630	5880	2410	2800	1480	483	179	81	85	216
25	590	1430	4670	5140	2190	2600	1310	462	219	75	89	201
26	774	1600	4570	4450	2350	2200	1190	430	318	70	95	190
27	840	1610	4390	3760	2830	1900	1090	410	326	72	95	181
28	829	1480	4000	3190	3260	1800	1010	410	304	73	130	184
29	829	1270	3600	2690	3300	1700	935	394	248	79	160	187
30	741	1090	3200	2100	---	1600	858	366	213	81	180	163
31	774	---	3200	1650	---	1500	---	344	---	81	190	---
TOTAL	11468	21086	84727	173450	74200	86600	58313	15713	9268	3563	3011	6562
MEAN	370	703	2733	5595	2559	2794	1944	507	309	115	97.1	219
MAX	840	1610	4670	10700	3300	4000	3200	801	491	187	190	252
MIN	156	265	917	1650	1480	1500	858	344	171	70	79	163
AC-FT	22750	41820	168100	344000	147200	171800	115700	31170	18380	7070	5970	13020
MEAN†	429	741	2777	5600	2562	2797	2039	564	374	174	159	268
CFSM†	.61	1.05	3.93	7.93	3.63	3.96	2.89	.80	.53	.25	.23	.38
IN.†	.70	1.17	4.54	9.15	3.92	4.57	3.22	.92	.59	.28	.26	.42
AC-FT†	26360	44080	170780	344380	147390	172004	121350	34690	22270	10690	9800	15950

CAL YR 1979 TOTAL 391156 MEAN 1072 MAX 4900 MIN 40 AC-FT 775900 MEAN† 1116 CFSM† 1.58 IN.† 21.46 AC-FT† 807720
WTR YR 1980 TOTAL 547961 MEAN 1497 MAX 10700 MIN 70 AC-FT 1087000 MEAN† 1542 CFSM† 2.18 IN.† 29.75 AC-FT† 1119780

† Adjusted for diversion of Oswego Canal.

14207500 TUALATIN RIVER AT WEST LINN, OR--Continued
(National stream quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1975 to current year.
WATER TEMPERATURES: October 1975 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 237 micromhos Feb. 15, 1977; minimum recorded, 62 micromhos Dec. 16, 1977.
WATER TEMPERATURES: Maximum, 27.5°C Aug. 6, 8, 9, 11, 17, 1977; minimum, 0.0°C several days in January 1977, 1979.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 222 micromhos Aug. 13; minimum, 73 micromhos Jan. 19.
WATER TEMPERATURES: Maximum, 24.0°C July 22, 26-29; minimum, 1.0°C Jan. 29 to Feb. 1.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	PH FIELD (UNITS)	OXYGEN, DIS-SOLVED (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	SILICA, DIS-SOLVED (MG/L AS SIO2)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT												
16...	1200	238	--	6.7	--	167	228	30	20	12	3.7	13
NOV												
08...	1300	675	10.4	6.6	9.2	174	--	28	21	13	4.5	10
DEC												
07...	1300	2820	8.6	6.9	10.6	101	80	74	19	9.1	3.1	6.2
JAN												
08...	1200	3400	5.4	6.4	12.5	103	84	225	19	8.6	2.8	5.3
FEB												
04...	1400	3060	3.1	6.7	12.7	106	425	396	18	9.4	3.3	5.5
APR												
23...	1000	1640	11.8	7.2	11.8	113	221	408	18	9.6	3.4	6.0
MAY												
19...	1100	426	14.9	7.1	10.2	153	209	371	23	11	4.0	8.9
JUN												
16...	1100	458	15.2	7.3	9.5	175	156	250	22	13	4.5	10
JUL												
08...	0900	149	19.0	7.4	7.6	200	33	K2	24	5	5.1	14
AUG												
12...	1500	90	21.5	7.2	8.5	216	K1139	225	21	16	5.3	16
SEP												
19...	1230	240	17.0	6.9	9.0	180	638	255	20	13	4.3	12

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
OCT												
16...	2.7	34	18	13	.2	1.5	.93	.40	1.300	1.3	3.0	.110
NOV												
08...	2.4	43	13	12	.1	1.4	2.2	.65	.650	2.4	3.7	.130
DEC												
07...	1.4	23	5.0	5.1	.1	.91	2.8	.78	.220	2.8	3.8	.190
JAN												
08...	1.1	25	2.8	4.8	.1	.54	2.5	.94	.160	2.5	3.6	.090
FEB												
04...	1.7	31	4.0	5.8	.0	.46	1.7	.34	.340	1.9	2.6	.150
APR												
23...	1.2	32	6.0	4.6	.1	.83	.94	.79	.310	1.1	2.2	.140
MAY												
19...	1.6	41	9.1	7.6	.2	1.2	.98	.61	.690	1.2	2.5	.340
JUN												
16...	2.2	49	11	9.5	.2	1.3	1.2	--	.010	2.0	--	.250
JUL												
08...	2.7	52	17	14	.5	1.0	1.7	1.2	.570	1.7	3.5	.140
AUG												
12...	3.0	49	24	14	.3	1.4	2.7	1.2	.250	2.8	4.2	.230
SEP												
19...	2.5	45	14	12	.2	.65	1.7	1.2	.070	1.8	3.1	.090

14207500 TUALATIN RIVER AT WEST LINN, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)	CARBON, ORGANIC TOTAL (MG/L AS C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	TUR-BID-ITY (NTU)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT												
16...	.230	3.5	.6	--	45	11	101	107	4.7	10	6.4	92
NOV												
08...	.400	--	--	6.4	51	8	126	112	7.7	19	35	94
DEC												
07...	.190	--	--	9.4	36	13	76	75	25	41	312	95
JAN												
08...	.150	--	--	--	33	8	83	71	19	23	211	97
FEB												
04...	.300	--	--	5.1	37	6	73	74	41	47	388	98
APR												
23...	.230	5.1	--	--	38	6	81	73	9.9	17	75	99
MAY												
19...	.390	--	--	4.4	44	3	92	94	7.0	15	17	72
JUN												
16...	.300	--	--	7.8	51	2	114	107	15	25	31	86
JUL												
08...	.250	6.3	1.5	--	58	6	149	131	3.1	7	2.8	77
AUG												
12...	.270	--	--	4.6	62	13	147	141	3.2	7	1.7	75
SEP												
19...	.160	--	--	7.0	50	5	132	113	2.9	17	11	82

DATE	IRON, DIS-SOLVED (UG/L AS FE)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	ARSENIC DIS-SOLVED (UG/L AS AS)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)
OCT										
16...	130	630	140	160	0	1	20	--	1	2
JAN										
08...	90	1200	20	60	1	1	20	100	2	0
APR										
23...	200	1300	30	70	1	2	20	100	<1	0
JUL										
08...	50	370	4	120	2	2	30	<100	<1	0

DATE	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	SILVER, DIS-SOLVED (UG/L AS AG)
OCT									
16...	0	--	<3	1	5	7	0	2	0
JAN									
08...	0	0	<3	1	0	13	0	12	0
APR									
23...	0	0	<3	0	2	23	2	11	0
JUL									
08...	10	10	<3	0	6	30	3	10	0

DATE	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SELE-NIUM, TOTAL (UG/L AS SE)	MERCURY DIS-SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, DIS-SOLVED (UG/L AS NI)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)
OCT									
16...	0	20	10	0	0	--	--	6	7
JAN									
08...	0	20	30	0	0	--	--	4	5
APR									
23...	0	9	50	0	0	.1	.0	2	9
JUL									
08...	0	9	20	0	0	.0	.5	4	7

14207500 TUALATIN RIVER AT WEST LINN, OR--Continued

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	ALDRIN, TOTAL (UG/L)	LINDANE TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DIELDRIN TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)
NOV												
08...	ND	ND	NO	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB												
04...	ND	ND	NO	ND	NO	ND	NO	ND	ND	ND	ND	ND
AUG												
12...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

DATE	METHOXYCHLOR, TOTAL (UG/L)	PCB TOTAL (UG/L)	MALATHION, TOTAL (UG/L)	PARATHION, TOTAL (UG/L)	DIAZINON, TOTAL (UG/L)	METHYL PARATHION, TOTAL (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	TOTAL TRITHION (UG/L)	METHYL TRITHION, TOTAL (UG/L)
NOV											
08...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB											
04...	ND	ND	ND	ND	ND	ND	--	--	--	ND	ND
AUG											
12...	ND	ND	ND	ND	ND	ND	--	--	--	ND	ND

DATE	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
NOV								
08...	NO	ND	ND	1.3	ND	ND	ND	ND

DATE	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)
NOV								
08...	NO	ND	NO	ND	NO	ND	ND	ND

14207500 TUALATIN RIVER AT WEST LINN, OR--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO AUGUST 1980

DATE	NOV 8,79		APR 23,80		MAY 19,80		JUN 16,80		JUL 8,80		AUG 12,80	
TIME	1300		1000		1100		1100		0900		1500	
TOTAL CELLS/ML	4300		0		16000		2400		64000		2500	
DIVERSITY: DIVISION	1.3		0.0		1.6		1.4		0.5		1.7	
.CLASS	1.3		0.0		1.6		1.4		0.5		1.7	
..ORDER	1.9		0.0		2.2		1.5		1.2		2.0	
...FAMILY	2.3		0.0		3.1		2.0		1.6		2.6	
....GENUS	2.8		0.0		3.3		2.3		2.0		0.0	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...CHARACIACEAE												
....SCHROEDERIA	--	-	--	-	--	-	--	-	--	-	39	2
...COELASTRACEAE												
....COELASTRUM	--	-	--	-	--	-	--	-	--	-	180	7
...HYDRODICTYACEAE												
....PEDIASTRUM	--	-	--	-	1800	11	--	-	--	-	--	-
...MICRACTINIACEAE												
....GOLENKINIA	*	0	--	-	*	0	--	-	990	2	--	-
....MICRACTINIUM	*	0	--	-	2700#	17	52	2	37000#	58	--	-
...OOCYSTACEAE	--	-	--	-	--	-	--	-	--	-	310	13
....ANKISTRODESMUS	72	2	--	-	*	0	130	5	--	-	64	3
....CHODATELLA	--	-	--	-	340	2	--	-	--	-	--	-
....DICTYOSPHAERIUM	230	5	--	-	130	1	100	4	3200	5	--	-
....GLOEOACTINIUM	--	-	--	-	--	-	--	-	1600	2	--	-
....KIRCHNERIELLA	130	3	--	-	--	-	--	-	--	-	--	-
....OOCYSTIS	72	2	--	-	--	-	52	2	2400	4	77	3
....SELENASTRUM	--	-	--	-	340	2	100	4	--	-	13	1
....WESTELLA	--	-	--	-	--	-	--	-	--	-	52	2
...SCENEDESMACEAE												
....CRUCIGENIA	370	9	--	-	--	-	--	-	--	-	210	8
....SCENEDESMUS	410	10	--	-	1600	10	410#	17	--	-	77	3
....TETRASTRUM	57	1	--	-	--	-	--	-	--	-	--	-
..TETRASPORALES												
...PALMELLACEAE												
....SPHAEROCYSTIS	--	-	--	-	270	2	--	-	--	-	--	-
..VOLVOCALES												
...CHLAMYDOMONADACEAE												
....CHLAMYDOMONAS	*	0	--	-	400	3	--	-	13000#	20	100	4
CHRYSOPHYTA												
.BACILLARIOPHYCEAE												
..CENTRALES												
...COSCINODISCACEAE												
....CYCLOTELLA	100	2	--	-	2600#	17	230	10	4700	7	100	4
....MELOSIRA	210	5	--	-	400	3	--	-	590	1	140	6
..PENNALES												
...GOMPHONEMATACEAE												
....GOMPHONEMA	--	-	--	-	--	-	13	1	--	-	--	-
...NAVICULACEAE												
....NAVICULA	*	0	--	-	400	3	13	1	--	-	--	-
...NITZSCHIACEAE												
....NITZSCHIA	*	0	--	-	200	1	13	1	--	-	77	3
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..CHROOCOCCALES												
...CHROOCOCCACEAE												
....ANACYSTIS	1300#	31	--	-	3200#	20	1300#	53	--	-	920#	37
..HORMOGONALES												
...OSCILLATORIACEAE												
....OSCILLATORIA	1200#	28	--	-	1200	8	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)												
.EUGLENOPHYCEAE												
..EUGLENALES												
...EUGLENACEAE												
....EUGLENA	--	-	--	-	*	0	13	1	--	-	13	1
....TRACHELOMONAS	--	-	--	-	*	0	--	-	590	1	77	3
PYRRHOPHYTA (FIRE ALGAE)												
.DINOPHYCEAE												
..PERIDINIALES												
...GLENODINIACEAE												
....GLENODINIUM	--	-	--	-	--	-	--	-	*	0	26	1

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

14207500 TUALATIN RIVER AT WEST LINN, OR--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	196	151	134	91	105	97	116	129	144	166	---	194
2	189	151	126	92	111	96	115	129	142	160	---	198
3	181	154	122	100	113	96	117	132	143	173	---	193
4	179	160	132	102	104	96	115	134	141	184	---	184
5	169	159	125	104	102	98	111	136	143	190	---	179
6	165	159	111	102	99	99	110	138	143	193	---	178
7	183	168	102	101	96	97	107	138	146	197	---	179
8	213	173	104	101	97	93	104	138	151	---	---	178
9	211	172	105	104	98	91	99	139	159	---	---	178
10	188	174	109	103	98	91	100	144	165	---	---	180
11	169	173	113	108	95	92	103	146	169	---	---	181
12	165	168	116	105	93	95	95	147	170	---	---	179
13	166	163	117	97	95	95	93	151	173	---	218	179
14	168	164	124	85	97	94	94	152	171	---	213	181
15	168	163	128	82	99	92	96	152	175	---	208	185
16	---	165	125	82	100	86	101	155	174	---	204	189
17	---	168	124	78	101	81	105	156	172	---	203	189
18	---	170	121	75	104	81	108	158	168	---	204	183
19	---	172	119	74	107	81	106	157	159	---	203	---
20	---	165	121	75	108	83	108	155	156	---	201	---
21	---	158	121	77	106	85	107	157	164	---	202	---
22	---	158	125	79	101	87	112	158	171	---	202	182
23	---	156	123	84	99	89	111	170	168	---	197	179
24	---	142	119	82	100	93	110	155	172	---	193	178
25	---	133	110	87	101	95	110	160	170	---	192	178
26	---	127	108	91	102	101	113	161	166	---	191	179
27	---	122	107	98	101	103	127	160	168	---	192	181
28	---	131	110	102	101	107	136	144	169	---	194	185
29	---	131	114	98	100	109	129	144	170	---	194	190
30	---	131	107	95	---	111	126	144	169	---	192	192
31	---	---	97	100	---	113	---	145	---	---	192	---
MEAN	181	156	117	92	101	94	109	148	162	180	200	183

14207500 TUALATIN RIVER AT WEST LINN, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	17.5	17.0	11.5	11.0	6.0	5.5	6.5	6.5	1.5	1.0	9.0	9.0
2	17.5	17.0	11.0	11.0	7.0	6.0	7.0	6.5	2.0	1.5	9.0	9.0
3	17.0	17.0	11.0	11.0	7.0	6.5	7.5	7.0	3.0	2.0	9.0	8.5
4	17.0	16.5	11.0	11.0	7.5	7.0	7.5	7.5	3.5	3.0	9.5	8.5
5	16.5	16.5	11.0	10.5	8.0	7.5	7.5	6.5	4.5	3.5	9.0	9.0
6	16.5	16.0	11.0	10.5	8.5	8.0	6.5	6.0	5.0	4.5	9.0	8.5
7	16.5	16.0	11.0	10.5	8.5	8.0	6.0	5.5	5.5	5.0	8.5	8.5
8	16.5	16.5	10.5	10.0	8.0	8.0	5.5	5.0	6.0	5.5	8.5	8.0
9	16.5	16.0	10.5	10.0	8.0	8.0	5.0	4.5	6.0	6.0	8.5	8.0
10	16.0	15.5	10.0	10.0	8.0	8.0	4.5	4.5	6.0	5.5	8.5	8.5
11	15.5	15.0	10.0	9.5	8.0	7.5	4.5	4.0	5.5	5.5	8.5	8.5
12	15.5	15.0	9.5	9.0	7.5	7.0	5.0	4.0	5.5	5.0	8.5	8.0
13	15.0	14.5	9.0	8.5	7.0	7.0	5.5	5.0	5.5	5.0	8.0	7.5
14	14.5	14.5	8.5	8.0	7.0	7.0	6.0	6.0	5.0	4.5	7.5	7.0
15	15.0	14.5	8.0	8.0	7.0	6.5	6.0	6.0	4.5	4.5	7.0	6.5
16	14.5	14.5	8.0	7.5	7.0	7.0	6.0	6.0	4.5	4.5	7.0	6.5
17	14.5	14.0	8.0	8.0	8.0	7.0	6.0	6.0	4.5	4.5	7.0	6.5
18	14.0	13.5	8.0	8.0	8.5	8.0	6.0	5.5	4.5	4.5	7.0	6.5
19	13.5	13.0	8.0	7.5	8.5	8.0	5.5	4.5	5.5	4.5	7.5	7.0
20	13.0	12.0	7.5	7.5	8.5	8.0	4.5	4.5	6.5	5.5	8.0	7.5
21	12.5	12.0	7.5	7.0	9.0	8.5	4.5	4.0	7.0	6.5	8.5	8.0
22	12.0	12.0	7.0	6.5	9.0	8.5	4.0	4.0	7.0	7.0	8.5	8.5
23	12.5	12.0	6.5	6.5	8.5	7.5	4.0	4.0	7.0	6.5	8.5	8.0
24	12.5	12.0	7.0	6.5	7.5	6.5	4.5	4.0	7.0	6.5	8.5	8.0
25	12.5	12.0	7.0	6.5	6.5	6.5	4.5	4.5	7.5	7.0	8.5	8.0
26	12.5	12.0	6.5	6.5	6.5	6.5	4.5	4.0	8.0	7.5	8.5	8.5
27	12.5	12.0	6.5	6.5	6.5	6.5	4.0	3.5	8.0	8.0	9.0	8.0
28	13.0	12.5	6.5	6.0	6.5	6.5	3.5	2.5	8.5	8.0	9.0	8.5
29	12.5	12.5	6.0	6.0	6.5	6.0	2.5	1.0	9.0	8.5	9.0	9.0
30	12.5	12.0	6.0	6.0	6.0	6.0	1.0	1.0	---	---	9.0	8.5
31	12.0	11.5	---	---	6.5	6.0	1.0	1.0	---	---	8.5	8.5
MONTH	17.5	11.5	11.5	6.0	9.0	5.5	7.5	1.0	9.0	1.0	9.5	6.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.5	8.5	15.5	14.0	14.5	14.5	19.5	18.0	23.5	21.5	18.0	17.5
2	9.0	8.5	15.5	15.0	---	14.5	19.5	18.5	22.0	21.0	18.0	17.5
3	9.5	8.5	15.0	14.5	---	---	18.5	18.0	22.0	20.5	18.0	17.0
4	9.5	9.0	15.5	14.5	---	---	---	---	22.0	20.5	18.0	17.0
5	9.5	9.0	15.5	14.5	---	---	---	---	21.0	20.0	18.0	17.0
6	9.5	9.0	15.5	14.5	---	---	---	---	21.5	20.0	18.0	17.5
7	9.5	9.0	16.0	14.5	---	---	---	---	21.5	20.0	18.5	18.0
8	9.5	9.0	15.5	15.0	---	---	20.0	---	21.5	20.5	18.5	18.0
9	9.0	9.0	15.0	14.5	---	---	20.0	19.0	22.5	20.5	19.0	18.0
10	9.0	8.5	14.5	14.5	---	---	20.0	18.5	22.5	21.0	18.5	18.0
11	10.0	9.0	14.5	14.0	---	---	19.5	19.0	22.5	21.5	18.5	18.0
12	10.5	9.5	14.0	13.5	---	---	19.5	19.0	22.5	21.5	18.0	18.0
13	11.0	10.0	14.0	13.5	---	---	20.0	19.0	21.5	21.0	17.5	17.0
14	11.5	10.5	14.0	13.5	---	---	20.0	19.5	21.5	20.5	17.5	17.0
15	12.5	11.5	14.0	13.0	---	---	21.0	19.5	21.0	20.0	17.5	17.0
16	12.5	11.5	14.5	13.0	15.5	---	21.0	20.0	21.0	20.0	18.0	17.0
17	12.5	12.0	15.5	13.5	17.0	15.0	21.5	20.0	20.5	20.0	17.5	17.0
18	12.0	11.5	16.0	14.5	16.5	15.0	21.5	20.0	20.0	19.5	17.5	17.0
19	12.0	12.0	16.0	15.0	17.0	15.5	21.5	20.5	21.0	19.0	17.0	17.0
20	12.5	12.0	16.5	15.0	17.0	16.0	22.5	20.5	20.5	19.5	17.0	16.5
21	12.0	12.0	16.0	16.0	17.5	16.0	23.5	21.5	20.0	19.5	16.5	16.0
22	12.5	12.0	16.0	15.5	17.5	17.0	24.0	22.0	20.0	19.0	16.5	15.5
23	12.5	11.5	15.5	15.0	17.5	17.0	23.5	22.0	20.0	19.0	16.5	15.5
24	12.5	12.0	15.0	14.5	17.0	16.5	22.5	21.5	20.0	19.0	16.0	15.5
25	13.0	12.0	15.0	14.5	17.0	16.5	23.0	21.0	20.5	19.0	16.0	15.5
26	14.0	12.5	14.5	14.0	17.0	16.0	24.0	21.5	20.0	19.0	16.0	15.5
27	14.5	13.5	14.5	14.0	17.5	16.5	24.0	21.5	19.5	19.0	16.0	15.5
28	14.5	14.0	15.0	14.0	18.0	16.5	24.0	22.0	19.5	18.5	16.0	15.5
29	14.0	13.5	14.5	14.0	18.0	17.0	24.0	21.5	19.0	18.5	16.0	15.5
30	14.5	13.5	14.5	14.0	19.0	17.5	23.5	21.5	18.5	18.0	16.0	15.5
31	---	---	14.5	14.0	---	---	23.5	21.5	18.0	18.0	---	---
MONTH	14.5	8.5	16.5	13.0	19.0	14.5	24.0	18.0	23.5	18.0	19.0	15.5

14207740 WILLAMETTE RIVER ABOVE FALLS, AT OREGON CITY, OR

LOCATION.--Lat 45°20'55", long 122°37'08", in SW¼SW¼ sec.31, T.2 S., R.2 E., Clackamas County, Hydrologic Unit 17090007, on right bank 0.2 mi (0.3 km) above Willamette Falls, 0.6 mi (1.0 km) downstream from Tualatin River, and at mile 26.8 (43.1 km).

DRAINAGE AREA.--10,000 mi² (25,900 km²), approximately.

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Flow regulated by many reservoirs upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 64.79 ft (19.748 m) Dec. 17, 1977; minimum recorded, 52.65 ft (16.048 m) Feb. 8, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 63.74 ft (19.428 m) Jan. 15; minimum, 53.65 ft (16.353 m) July 13, 14.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54.83	56.73	---	56.63	56.31	56.39	55.47	55.38	54.13	55.23	53.94	54.25
2	54.83	56.82	---	57.02	56.17	56.15	55.40	55.21	54.06	55.14	54.20	54.58
3	54.83	---	---	56.94	56.76	55.90	55.29	55.07	54.14	55.02	54.37	54.81
4	54.73	---	---	56.87	56.80	55.68	55.18	54.93	54.34	55.05	54.60	54.85
5	54.58	---	---	57.26	56.48	55.71	55.19	54.85	54.48	55.22	54.53	54.95
6	54.63	---	---	58.36	56.23	55.81	55.47	54.80	54.48	55.06	54.25	54.93
7	54.67	---	---	58.55	56.36	55.76	56.33	54.76	54.38	55.00	53.99	54.94
8	54.70	---	---	58.06	56.43	55.54	56.65	54.70	54.43	54.88	53.90	54.93
9	54.61	---	---	58.69	56.15	55.30	56.65	54.68	54.38	54.67	53.93	54.92
10	54.62	---	---	59.35	55.86	55.10	57.19	54.69	54.26	54.31	53.97	54.90
11	54.68	---	57.17	59.55	55.58	55.11	57.53	54.75	54.13	54.02	53.96	54.84
12	54.75	---	56.84	60.18	55.33	55.48	57.40	54.78	54.02	53.91	53.91	54.88
13	54.82	---	56.67	61.43	55.13	56.24	57.10	54.75	53.99	53.71	53.90	54.99
14	54.86	---	56.51	62.89	54.97	57.33	56.69	54.71	54.14	53.71	53.91	55.04
15	54.95	---	56.37	63.57	54.83	58.46	56.45	54.66	54.26	54.01	53.94	55.05
16	55.00	---	56.24	63.25	54.72	58.78	56.40	54.64	54.18	54.24	53.96	55.05
17	55.04	---	56.17	62.46	54.63	58.39	56.18	54.60	54.07	54.26	54.11	55.05
18	55.10	---	56.34	61.46	54.76	57.91	56.04	54.57	53.95	54.34	54.06	55.06
19	55.35	---	56.75	60.75	55.58	57.64	55.93	54.53	53.89	54.29	54.01	55.10
20	55.96	---	56.89	60.37	55.94	57.37	55.92	54.45	54.44	54.16	53.98	55.18
21	56.58	---	57.15	60.05	55.86	57.17	56.20	54.41	55.35	54.29	53.97	55.29
22	56.61	---	57.55	59.67	55.61	57.02	56.47	54.18	55.34	54.35	53.88	55.39
23	56.43	---	57.77	59.19	55.44	56.80	56.73	53.79	55.30	54.20	53.96	55.40
24	56.37	---	58.16	58.76	55.60	56.60	56.60	53.80	55.26	54.13	54.09	55.30
25	56.35	---	58.12	58.19	55.57	56.41	56.40	53.86	55.30	54.22	53.95	55.28
26	56.51	---	57.59	57.67	55.67	56.19	56.23	54.04	55.36	54.45	53.93	55.25
27	56.70	---	57.00	57.05	56.23	56.03	56.01	54.32	55.41	54.59	54.10	55.20
28	56.71	---	56.55	56.60	56.43	55.94	55.84	54.46	55.41	54.60	54.28	55.19
29	56.67	---	56.29	56.69	56.47	55.78	55.74	54.45	55.36	54.29	54.22	55.19
30	56.57	---	56.04	56.67	---	55.65	55.60	54.38	55.29	54.02	54.18	55.20
31	56.55	---	55.93	56.54	---	55.56	---	54.28	---	53.81	54.10	---
MEAN	55.47	---	---	59.06	55.79	56.43	56.21	54.56	54.58	54.43	54.07	55.03

14207770 WILLAMETTE RIVER BELOW FALLS, AT OREGON CITY, OR

LOCATION.--Lat 45°21'28", long 122°36'35", in NE¼NW¼ sec.31, T.2 S., R.2 E., Clackamas County, Hydrologic Unit 17090007, on right bank 0.5 mi (0.8 km) below Willamette Falls, 1.4 mi (2.2 km) upstream from Clackamas River, and at mile 26.2 (42.2 km).

DRAINAGE AREA.--10,000 mi² (25,900 km²), approximately.

PERIOD OF RECORD.--November 1976 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (Oregon State Highway Divsion bench mark).

REMARKS.--Flow regulated by many reservoirs upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height recorded, 32.03 ft (9.763 m) Dec. 17, 1977; minimum, 1.86 ft (0.567 m) July 10, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 29.40 ft (8.961 m) Jan. 14; minimum, 2.85 ft (0.869 m) Aug. 23.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	5.80	3.02	4.31	9.22	7.51	8.24	10.56	9.19	9.74	12.15	9.56	10.84
2	6.53	3.51	4.94	9.67	7.80	8.54	13.55	9.57	11.72	12.51	11.04	11.55
3	6.86	3.70	5.57	10.10	7.84	8.72	16.29	13.42	15.12	12.11	11.13	11.49
4	7.67	4.29	5.87	10.23	7.94	8.77	18.91	16.16	17.50	11.81	10.88	11.23
5	7.70	4.50	5.90	10.29	8.06	8.89	19.21	18.59	18.85	13.72	11.17	12.29
6	7.97	4.55	5.96	10.39	8.54	9.19	19.08	18.25	18.68	15.37	13.74	14.58
7	7.80	4.28	5.90	10.00	8.50	9.07	18.25	16.40	17.25	15.27	14.68	14.96
8	7.95	4.64	5.95	12.99	8.07	10.58	16.40	14.60	15.47	14.76	13.90	14.22
9	7.35	4.21	5.43	12.44	11.38	12.01	14.60	13.10	13.65	17.43	14.66	16.10
10	7.13	4.05	5.42	11.35	10.38	10.84	13.10	11.83	12.33	17.92	17.47	17.72
11	6.86	4.18	5.32	10.73	9.66	10.14	11.82	11.10	11.39	18.18	17.75	17.94
12	5.80	3.76	4.72	10.54	9.16	9.77	11.22	10.59	10.92	22.95	18.13	20.28
13	5.65	3.18	4.25	13.58	9.57	10.96	11.03	10.32	10.62	26.22	22.93	24.25
14	5.66	3.12	4.33	16.38	13.36	14.61	10.75	10.01	10.35	29.40	26.35	27.87
15	5.94	3.46	4.70	18.99	16.18	17.08	10.70	9.67	10.20	29.19	27.69	28.59
16	6.32	3.81	4.95	19.22	18.57	18.85	10.17	9.16	9.58	27.83	26.30	27.13
17	6.22	3.58	4.81	19.30	18.47	18.88	10.83	8.97	9.67	26.35	23.90	25.23
18	7.04	3.98	5.34	18.60	16.76	17.65	11.64	9.59	10.48	23.87	21.67	22.72
19	8.07	4.97	6.47	16.86	14.86	15.79	12.64	10.64	11.47	21.53	20.34	20.79
20	8.90	5.92	7.38	14.90	13.20	13.97	12.75	11.43	11.94	20.28	19.40	19.82
21	9.32	7.43	8.18	13.31	11.84	12.59	13.45	11.69	12.38	19.40	18.58	18.89
22	9.60	7.65	8.36	10.12	7.40	8.50	13.58	12.63	13.06	18.64	17.57	18.01
23	9.36	7.43	8.14	10.37	8.17	9.23	13.76	12.87	13.27	17.58	16.41	16.92
24	9.19	7.18	7.90	11.62	9.74	10.48	14.54	13.31	13.87	16.41	15.16	15.80
25	9.40	7.10	8.05	13.18	11.58	12.28	14.41	13.29	13.79	15.20	13.52	14.32
26	9.20	7.49	8.21	13.44	12.95	13.12	13.31	11.77	12.48	13.54	12.64	13.10
27	9.25	7.91	8.46	13.22	12.30	12.80	11.87	10.50	11.22	12.78	10.87	12.07
28	8.84	7.90	8.36	12.39	11.02	11.80	10.85	9.58	10.25	11.36	10.32	10.77
29	8.62	7.63	7.87	11.09	10.00	10.77	10.60	9.18	9.72	12.25	10.73	11.55
30	8.46	7.41	7.91	10.75	9.60	10.00	10.32	8.77	9.34	12.12	11.25	11.76
31	8.85	7.34	7.95	---	---	---	10.83	8.67	9.43	11.32	10.38	10.91
MONTH	9.60	3.02	6.35	19.30	7.40	11.80	19.21	8.67	12.44	29.40	9.56	16.89

14207770 WILLAMETTE RIVER BELOW FALLS, AT OREGON CITY, OR--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	11.30	10.08	10.65	11.60	10.60	11.18	8.34	6.75	7.44	11.35	10.06	10.74
2	11.67	9.99	10.65	11.13	10.00	10.62	8.35	6.55	7.27	10.89	9.94	10.40
3	12.40	11.05	11.85	10.72	9.44	10.05	8.34	6.32	7.11	11.10	9.76	10.39
4	12.06	11.34	11.76	10.47	9.15	9.70	8.32	6.25	7.03	9.91	8.65	9.26
5	11.43	10.29	10.88	11.05	9.80	10.50	8.53	6.47	7.26	9.50	8.48	8.93
6	10.82	9.80	10.26	11.08	10.19	10.63	8.70	7.05	7.78	9.73	8.79	9.24
7	10.89	10.05	10.55	10.74	9.80	10.20	9.59	8.25	8.95	10.46	9.54	9.93
8	10.84	10.31	10.51	9.99	8.62	9.34	10.16	9.33	9.62	10.64	10.24	10.45
9	10.50	9.55	10.10	8.93	7.64	8.27	10.72	9.84	10.27	10.86	10.14	10.56
10	9.60	8.53	9.23	8.60	7.32	7.82	12.08	10.77	11.63	10.92	10.02	10.56
11	9.21	7.88	8.44	8.76	7.50	8.05	12.81	12.03	12.51	10.84	9.80	10.27
12	9.37	7.75	8.34	9.54	8.12	8.97	12.40	11.03	11.82	11.01	9.79	10.43
13	9.94	8.01	8.86	11.87	9.31	11.13	11.77	10.54	11.08	10.97	9.55	10.12
14	9.98	8.41	9.14	14.01	11.58	12.92	11.65	10.35	10.88	10.73	8.84	9.63
15	10.61	8.68	9.48	15.57	14.06	15.03	11.74	10.31	10.83	10.73	8.52	9.39
16	9.98	8.06	9.01	15.65	15.03	15.35	11.71	10.32	10.86	10.07	8.37	9.05
17	10.03	7.31	8.30	15.03	13.91	14.47	11.90	10.13	10.81	10.24	8.83	9.38
18	10.70	7.49	8.87	14.14	13.17	13.62	11.12	9.75	10.26	9.86	8.60	9.15
19	11.23	8.82	10.00	13.49	12.34	12.86	11.12	9.59	10.23	9.25	8.10	8.71
20	11.35	9.74	10.43	12.66	11.56	12.04	10.51	9.40	9.84	8.57	7.10	7.72
21	11.06	9.55	10.18	12.02	10.97	11.43	10.90	9.85	10.31	8.51	7.27	7.94
22	10.92	9.72	10.54	11.30	10.30	10.80	11.19	10.75	10.95	8.95	7.82	8.35
23	10.06	8.51	9.48	10.56	9.62	10.13	11.53	10.82	11.26	9.37	8.47	8.88
24	9.73	8.50	8.91	9.86	8.97	9.49	11.40	10.95	11.17	10.33	9.60	10.07
25	9.47	8.22	8.80	9.48	8.37	9.08	11.50	10.43	11.03	10.36	8.67	9.50
26	10.35	8.20	9.22	9.04	7.84	8.43	10.72	9.34	10.01	9.67	8.67	9.25
27	11.70	9.55	10.80	8.78	7.64	8.23	10.06	8.31	9.21	10.37	9.15	9.65
28	12.16	11.16	11.56	8.61	7.41	7.97	9.73	8.17	9.05	10.81	9.51	10.32
29	11.88	11.20	11.68	8.87	7.19	7.88	10.07	8.93	9.62	11.05	10.18	10.58
30	---	---	---	8.38	6.97	7.60	11.13	9.67	10.62	11.49	10.28	10.92
31	---	---	---	8.55	6.89	7.58	---	---	---	12.04	11.25	11.64
MONTH	12.40	7.31	9.95	15.65	6.89	10.37	12.81	6.25	9.89	12.04	7.10	9.72

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	11.87	10.92	11.35	9.37	7.50	8.33	7.59	4.38	5.70	7.05	3.87	5.04
2	11.50	10.79	11.12	8.48	6.32	7.50	6.85	3.40	5.24	7.03	4.17	5.11
3	11.51	10.95	11.23	7.83	5.65	6.62	6.71	3.04	4.72	6.89	3.63	4.72
4	11.47	10.60	10.92	7.79	5.51	6.71	6.69	4.04	4.98	6.55	3.55	4.77
5	11.44	10.47	11.01	7.80	5.43	6.29	7.20	4.29	5.27	6.67	3.71	5.03
6	10.92	10.15	10.46	8.18	6.16	6.86	7.39	4.39	5.47	6.97	3.80	5.21
7	10.97	10.24	10.55	8.64	6.69	7.47	7.51	4.49	5.66	7.09	3.91	5.36
8	11.47	11.00	11.21	8.81	6.64	7.40	7.69	4.44	5.74	7.06	4.05	5.31
9	11.91	11.23	11.53	8.86	6.63	7.42	7.54	3.68	5.33	7.02	4.17	5.42
10	12.45	11.26	11.89	8.91	6.50	7.39	7.08	3.47	5.15	7.27	4.22	5.54
11	12.10	10.99	11.42	9.15	6.44	7.59	7.30	4.09	5.52	7.03	4.12	5.44
12	12.05	10.98	11.41	9.00	5.82	7.07	7.69	4.74	5.97	6.85	4.03	5.25
13	11.98	11.02	11.49	8.16	4.96	6.24	7.51	4.35	5.79	6.61	3.92	5.13
14	12.24	11.37	11.76	7.85	4.83	6.00	6.77	3.73	5.18	6.30	3.79	4.87
15	12.15	11.21	11.63	7.51	4.70	5.90	6.05	3.07	4.50	6.36	3.65	4.70
16	11.56	10.53	11.20	7.60	5.62	6.47	6.21	3.23	4.40	6.58	3.74	4.75
17	11.93	11.17	11.48	6.72	4.56	5.69	6.25	3.02	4.24	6.64	4.08	4.98
18	12.39	11.61	11.89	6.81	4.32	5.28	6.17	3.40	4.48	6.59	4.12	5.04
19	12.43	12.18	12.32	6.42	3.97	5.04	6.26	3.70	4.54	6.56	4.13	5.15
20	12.42	10.85	11.71	6.35	4.13	4.88	6.42	3.73	4.57	6.95	4.11	5.45
21	10.97	9.80	10.14	6.61	4.16	5.02	6.32	3.77	4.73	7.16	4.10	5.50
22	10.59	9.49	9.95	7.34	5.14	5.96	6.52	3.51	4.74	7.17	4.35	5.59
23	10.24	9.79	10.05	7.36	4.81	5.76	6.37	2.85	4.48	7.29	4.46	5.73
24	10.89	10.27	10.57	7.24	4.62	5.60	6.67	3.23	4.77	7.40	4.50	5.80
25	11.05	10.23	10.61	7.44	4.50	5.60	6.79	3.34	4.97	7.54	4.47	5.83
26	11.30	10.46	10.41	7.54	4.36	5.59	7.29	3.86	5.42	8.34	4.65	6.25
27	11.32	10.22	10.67	7.72	4.39	5.64	7.67	4.25	5.76	8.24	5.03	6.41
28	10.69	8.67	9.61	7.52	4.04	5.55	7.55	4.23	5.70	8.13	4.95	6.24
29	9.24	7.13	8.10	7.61	4.03	5.65	7.59	4.14	5.60	7.73	4.88	6.09
30	8.84	6.88	7.66	7.82	4.62	5.92	7.39	4.00	5.41	7.27	4.61	5.64
31	---	---	---	7.68	4.64	5.95	7.22	4.08	5.30	---	---	---
MONTH	12.45	6.88	10.85	9.37	3.97	6.27	7.69	2.85	5.14	8.34	3.55	5.38
YEAR	29.40	2.85	9.59									

14208600 TIMOTHY LAKE NEAR GOVERNMENT CAMP, OR

LOCATION.--Lat 45°06'50", long 121°48'35", in NE¼ sec.27, T.5 S., R.8 E., Clackamas County, Hydrologic Unit 17090011, Mount Hood National Forest, in intake structure 350 ft (107 m) upstream from dam on Oak Grove Fork, 0.4 mi (0.6 km) upstream from Anvil Creek, 14 mi (22.5 km) south of Government Camp, and at mile 15.8 (25.4 km).

DRAINAGE AREA.--53.8 mi^2 (139.3 km^2).

PERIOD OF RECORD.--May 1956 to current year. Prior to October 1957, published as Timothy Meadows Reservoir.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Portland General Electric Co.).

REMARKS.--Reservoir is formed by earthfill dam with concrete spillway built by Portland General Electric Co. Usable storage began May 28, 1956. Capacity, 65,710 acre-ft (81.0 hm^3) at elevation 3,190 ft (972.3 m), normal maximum operating level. Usable capacity increased in 1966 water year to 64,450 acre-ft (79.5 hm^3) between elevations 3,125.0 ft (952.50 m), invert of outlet pipe, and 3,192.0 ft (972.92 m), top of radial gates. Storage of 4,060 acre-ft (5.0 hm^3) below elevation 3,125.0 ft (952.50 m) not normally available for release. Water is used for power generation. Figures given herein represent total contents.

COOPERATION.--Elevations and capacity table furnished by Portland General Electric Co.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 68,800 acre-ft (84.8 hm^3) Oct. 3, 1967, elevation, 3,192.2 ft (972.98 m); minimum observed, 16,010 acre-ft (19.7 hm^3) Feb. 24, 1957, elevation, 3,144.5 ft (958.44 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 63,760 acre-ft (78.6 hm^3) Sept. 22, elevation, 3,188.57 ft (971.876 m); minimum observed, 31,630 acre-ft (39.0 hm^3) Dec. 20, elevation, 3,161.72 ft (963.692 m).

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept.30	3,184.58	58,480	-
Oct. 31	3,176.59	48,480	-10,000
Nov. 30	3,162.84	32,810	-15,670
Dec. 31	3,163.45	33,460	+650
CAL YR 1979	-	-	-1,670
Jan. 31	3,168.32	38,810	+5,350
Feb. 29	3,165.26	35,410	-3,400
Mar. 31	3,167.97	38,420	+3,010
Apr. 30	3,176.87	48,820	+10,400
May 31	3,183.53	57,130	+8,310
June 30	3,186.38	60,840	+3,710
July 31	3,187.57	62,420	+1,580
Aug. 31	3,188.13	63,170	+750
Sept.30	3,186.34	60,790	-2,380
WTR YR 1980	-	-	+2,310

14208700 OAK GROVE FORK NEAR GOVERNMENT CAMP, OR

LOCATION.--Lat 45°06'50", long 121°48'50", in NE¼ sec.27, T.5 S., R.8 E., Clackamas County, Hydrologic Unit 17090011, Mount Hood National Forest, on right bank 0.1 mi (0.2 km) upstream from Anvil Creek, 0.3 mi (0.5 km) downstream from Timothy Lake, 14 mi (23 km) south of Government Camp, and at mile 15.5 (24.9 km).

DRAINAGE AREA.--54.4 mi² (140.9 km²).

PERIOD OF RECORD.--July 1956 to current year.

GAGE.--Water-stage recorder and artificial control. Datum of gage is 3,041.83 ft (927.150 m) National Geodetic Vertical Datum of 1929 (Portland General Electric Co. bench mark).

REMARKS.--Records good. Flow regulated since 1956 by Timothy Lake (see station 14208600). No diversion above station.

AVERAGE DISCHARGE.--24 years, 130 ft³/s (3.682 m³/s), 32.45 in/yr (824 mm/yr), 94,180 acre-ft/yr (116 hm³/yr), adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,110 ft³/s (59.8 m³/s) Dec. 24, 1964, gage height, 3.93 ft (1.198 m), from rating curve extended above 290 ft³/s (8.21 m³/s) on basis of slope-area measurement of peak flow; minimum, 3.7 ft³/s (0.10 m³/s) Sept. 23, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 387 ft³/s (11.0 m³/s) Sept. 26-29, gage height, 2.69 ft (0.820 m); minimum, 26 ft³/s (0.74 m³/s) June 2, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	127	348	324	38	218	35	39	37	34	34	35	37
2	127	352	101	38	193	35	39	35	33	34	35	38
3	74	352	35	38	171	35	39	35	33	35	35	38
4	34	343	38	62	197	35	39	35	34	35	34	38
5	34	338	38	53	207	35	39	35	35	35	35	38
6	34	348	47	120	161	35	40	35	34	34	35	38
7	34	352	38	244	174	35	40	35	34	34	35	37
8	34	348	37	171	193	35	40	35	34	34	37	37
9	34	343	38	110	211	35	40	35	34	35	37	37
10	60	348	38	39	225	35	40	35	34	35	35	37
11	147	348	161	39	233	35	40	35	34	35	34	37
12	269	343	260	43	248	35	40	34	35	35	35	37
13	338	348	273	48	248	35	41	37	35	35	35	38
14	260	343	282	52	260	122	41	35	35	34	37	38
15	328	343	273	47	269	197	43	35	34	34	37	38
16	309	343	286	45	273	207	43	34	34	34	37	38
17	328	343	282	43	273	204	43	33	34	35	37	37
18	305	333	282	41	260	204	43	33	34	35	37	37
19	296	333	278	41	237	225	43	33	35	35	37	38
20	314	333	167	60	240	204	43	33	35	34	37	38
21	338	333	39	84	260	229	44	34	34	34	37	38
22	343	328	39	127	265	229	43	35	34	34	38	65
23	324	328	39	150	265	233	41	35	34	34	37	112
24	338	291	39	171	269	237	41	35	34	34	37	65
25	328	309	38	187	252	248	39	35	35	35	37	135
26	324	328	38	207	94	233	37	34	35	35	37	382
27	328	328	38	229	34	252	37	34	35	34	38	382
28	343	328	38	240	35	138	37	34	35	34	38	382
29	296	328	38	256	35	39	37	34	35	34	38	372
30	319	324	38	266	---	39	37	34	34	34	38	352
31	333	---	38	256	---	39	---	34	---	35	38	---
TOTAL	7100	10107	3700	3545	6000	3734	1208	1072	1029	1068	1129	3036
MEAN	229	337	119	114	207	120	40.3	34.6	34.3	34.5	36.4	101
MAX	343	352	324	266	273	252	44	37	35	35	38	382
MIN	34	291	35	38	34	35	37	33	33	34	34	37
AC-FT	14080	20050	7340	7030	11900	7410	2400	2130	2040	2120	2240	6020
MEAN†	66.4	73.6	130	201	148	169	215	170	96.6	60.2	48.6	61.2
CFSM†	1.22	1.35	2.39	3.69	2.72	3.11	3.95	3.12	1.78	1.11	.89	1.12
IN.†	1.41	1.51	2.75	4.27	2.93	3.59	4.41	3.60	1.98	1.28	1.03	1.25
AC-FT†	4080	4380	7990	12380	8500	10420	12800	10440	5750	3700	2990	3640

CAL YR 1979 TOTAL 41874 MEAN 115 MAX 352 MIN 31 AC-FT 83060 MEAN† 112 CFSM† 2.06 IN.† 28.06 AC-FT† 81390
WTR YR 1980 TOTAL 42728 MEAN 117 MAX 382 MIN 33 AC-FT 84750 MEAN† 120 CFSM† 2.21 IN.† 30.01 AC-FT† 87060

† Adjusted for change in contents in Timothy Lake.

14209000 OAK GROVE FORK ABOVE POWERPLANT INTAKE, OR

LOCATION.--Lat 45°04'20", long 121°57'00", on line between secs.3 and 4, T.6 S., R.7 E., Clackamas County, Hydrologic Unit 17090011, Mount Hood National Forest, on right bank 0.2 mi (0.3 km) upstream from Spring Creek, 0.7 mi (1.1 km) upstream from Kink Creek, 1.0 mi (1.6 km) upstream from Portland General Electric Co. diversion dam, 24 mi (39 km) southeast of Estacada, and at mile 6.1 (9.8 km).

DRAINAGE AREA.--126 mi^2 (326 km^2).

PERIOD OF RECORD.--May 1909 to current year. Monthly discharge only for some periods, published in WSP 1318. Published as both Oak Grove Fork of Clackamas River at proposed intake, near Cazadero, and Oak Grove Fork of Clackamas River at intake, near Cazadero, May 1909 to September 1910, as Oak Grove Fork of Clackamas River at intake, near Cazadro, October 1910 to September 1921, and as Oak Grove Fork at Portland General Electric Power Co. intake, October 1921 to September 1929.

REVISED RECORDS.--WSP 1248: 1909, 1910(M), 1916, 1918, 1923, 1932. WSP 1935: 1914, 1921.

GAGE.--Water-stage recorder. Datum of gage is 2,052.31 ft (625.544 m) National Geodetic Vertical Datum of 1929. May 21, 1909, to Nov. 17, 1911, nonrecording gage and Mar. 26, 1912, to Sept. 30, 1923, water-stage recorder, at various sites 0.7 mi (1.1 km) downstream, below Kink Creek, at different datum.

REMARKS.--Record fair. Flow regulated since 1956 by Timothy Lake (see station 14208600). No diversion above station.

AVERAGE DISCHARGE.--71 years, 501 ft^3/s (14.19 m^3/s), 363,000 acre-ft/yr (448 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,000 ft^3/s (142 m^3/s) Jan. 7, 1923, gage height, 5.45 ft (1.661 m), site and datum then in use, from rating curve extended above 2,300 ft^3/s (65.1 m^3/s) on basis of peak discharge for other stations in Clackamas River basin; minimum, 208 ft^3/s (5.89 m^3/s) Aug. 28-31, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,640 ft^3/s (46.4 m^3/s) Jan. 14, gage height, 3.74 ft (1.140 m); minimum, 217 ft^3/s (6.15 m^3/s) Oct. 6, 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	332	586	536	379	530	487	358	542	369	257	272	248
2	326	580	567	363	586	470	347	536	374	286	262	281
3	301	592	464	379	605	458	342	517	374	286	253	253
4	230	599	625	379	599	481	347	517	358	291	239	244
5	226	586	592	517	605	475	379	530	353	286	239	248
6	221	580	499	475	631	452	441	499	342	286	239	244
7	221	580	435	567	631	435	424	470	353	286	239	244
8	221	561	385	517	612	429	429	452	342	291	244	234
9	244	561	374	487	592	412	493	446	332	286	244	234
10	257	554	441	385	580	407	511	441	326	286	234	244
11	337	548	452	369	567	452	493	412	326	281	239	244
12	441	554	548	698	554	441	481	401	321	281	239	253
13	530	561	542	1070	567	464	499	396	379	281	239	248
14	487	554	542	1450	567	511	530	385	358	281	253	244
15	536	542	542	1210	554	586	567	374	342	281	262	244
16	523	561	530	1000	554	573	548	374	332	276	248	253
17	548	567	523	886	561	586	567	353	326	286	239	253
18	586	580	542	753	561	599	554	342	326	286	253	257
19	618	554	561	664	580	592	573	347	321	281	262	253
20	631	542	511	612	573	573	599	353	311	281	262	262
21	612	548	446	599	554	561	651	385	311	281	257	267
22	605	561	412	592	554	548	580	385	306	281	253	248
23	592	567	385	580	567	548	573	379	306	276	244	306
24	599	605	385	573	567	542	567	374	306	276	244	286
25	592	586	369	567	573	542	561	390	321	276	248	257
26	605	586	353	561	554	548	548	435	306	281	244	548
27	586	567	326	561	470	554	561	424	301	281	244	586
28	580	542	316	554	511	499	612	390	296	281	248	586
29	561	530	301	548	511	385	592	374	281	281	253	586
30	561	530	291	554	---	374	554	363	262	276	248	573
31	592	---	281	561	---	369	---	358	---	272	253	---
TOTAL	14301	16964	14076	19410	16470	15353	15281	12944	9861	8718	7697	9228
MEAN	461	565	454	626	568	495	509	418	329	281	248	308
MAX	631	605	625	1450	631	599	651	542	379	291	272	586
MIN	221	530	281	363	470	369	342	342	262	257	234	234
AC-FT	28370	33650	27920	38500	32670	30450	30310	25670	19560	17290	15270	18300

CAL YR 1979 TOTAL 149724 MEAN 410 MAX 795 MIN 208 AC-FT 297000
WTR YR 1980 TOTAL 160303 MEAN 438 MAX 1450 MIN 221 AC-FT 318000

14209500 CLACKAMAS RIVER ABOVE THREE LYNX CREEK, OR

LOCATION.--Lat 45°07'30", long 122°04'20", in NE¼ sec.21, T.5 S., R.6 E., Clackamas County, Hydrologic Unit 17090011, Mount Hood National Forest, on right bank 0.1 mi (0.2 km) upstream from Three Lynx Creek, 0.25 mi (0.40 km) downstream from powerplant, 17 mi (27 km) southeast of Estacada, and at mile 47.8 (76.9 km).

DRAINAGE AREA.--479 mi² (1,241 km²).

PERIOD OF RECORD.--April 1909 to December 1913, October 1921 to current year. Prior to October 1911 (monthly discharge only), published in WSP 1318.

REVISED RECORDS.--WSP 1148: Drainage area. WSP 1248: 1910(M), 1912, 1948-50(M).

GAGE.--Water-stage recorder. Datum of gage is 1,091.69 ft (332.747 m) National Geodetic Vertical Datum of 1929 (levels by Portland General Electric Co.). Apr. 23, 1909, to Jan. 4, 1914, nonrecording gage at about same site and datum. Nov. 1, 1921, to Dec. 27, 1924, water-stage recorder at present site at datum 0.91 ft (0.277 m) higher.

REMARKS.--Records good. Minor regulation since May 1956 by Timothy Lake (see station 14208600). Considerable diurnal fluctuation during period of low flow.

AVERAGE DISCHARGE.--63 years, 1,985 ft³/s (56.22 m³/s), 56.28 in/yr (1,430 mm/yr), 1,438,000 acre-ft/yr (1.77 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 68,200 ft³/s (1,930 m³/s) Dec. 22, 1964, gage height, 21.7 ft (6.61 m), from floodmark, from rating curve extended above 34,100 ft³/s (966 m³/s) on basis of slope-area measurement at gage height 15.06 ft (4.590 m); minimum recorded, 292 ft³/s (8.27 m³/s) Sept. 25, 1980; minimum daily, 427 ft³/s (12.1 m³/s) Oct. 5, 1958.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 8,100 ft³/s (229 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 2	1130	8,420	238	6.76	2.060	Jan. 14	1700	*18,600	527	*10.70	3.261
Dec. 4	1430	9,920	281	7.44	2.268						

Minimum recorded, 292 ft³/s (8.27 m³/s) Sept. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	643	1510	1420	2010	1790	3160	1420	2320	1210	878	643	606
2	643	1420	5960	2050	2530	2730	1390	2240	1270	872	648	670
3	777	1360	5710	2270	3710	2530	1360	2120	1270	866	643	643
4	632	1430	7350	2170	3250	2520	1340	2040	1250	860	637	616
5	585	1630	5710	4200	2760	2590	1440	2210	1240	860	637	627
6	560	1570	3710	3660	3030	2400	1830	2110	1230	860	632	637
7	560	1460	2830	2960	3340	2190	1880	1930	1230	848	632	637
8	560	1370	2310	2570	2940	2120	1720	1800	1210	836	627	606
9	560	1300	2070	2840	2600	2090	2470	1740	1190	801	627	565
10	560	1250	2500	2270	2360	2020	3360	1700	1160	789	621	565
11	560	1210	2190	1990	2180	2060	2990	1650	1130	772	616	565
12	709	1170	2130	10300	2040	1880	2600	1600	1130	766	616	570
13	848	1140	1970	14400	1940	2180	2890	1540	1230	754	611	580
14	795	1120	1870	15600	1840	2350	3470	1460	1380	749	611	575
15	908	1100	1850	11400	1750	2330	3960	1410	1290	726	611	590
16	896	1170	1800	7280	1690	2100	3530	1410	1210	709	611	570
17	908	1310	1760	5890	1670	2050	3430	1360	1170	726	616	580
18	1030	1480	1780	4700	1750	2270	3340	1290	1150	709	643	703
19	1670	1360	1840	3810	2230	2220	3350	1270	1140	715	749	490
20	1740	1290	1920	3230	2440	2210	3510	1270	1110	709	659	681
21	1470	1240	2430	2850	2330	2160	3700	1250	1100	703	555	732
22	1370	1340	2420	2570	2160	2050	3170	1250	1100	692	580	654
23	1810	1780	2100	2350	2080	2000	2900	1260	1100	681	580	692
24	1610	2500	1920	2220	2000	1930	2780	1230	1100	681	580	698
25	2070	2830	1770	2120	2020	1860	2690	1270	1100	676	590	606
26	2330	2210	1650	2030	3730	1830	2580	1400	1040	670	590	932
27	2130	1850	1540	1830	4070	1840	2660	1510	963	665	611	944
28	1880	1630	1440	1690	3890	1750	3000	1480	926	665	595	944
29	1670	1510	1370	1640	3680	1550	2910	1360	908	654	590	944
30	1530	1430	1330	1600	---	1500	2560	1270	884	648	595	914
31	1670	---	1310	1610	---	1460	---	1230	---	648	611	---
TOTAL	35684	44970	77960	128110	73800	65930	80230	48980	34421	23188	19167	20136
MEAN	1151	1499	2515	4133	2545	2127	2674	1580	1147	748	618	671
MAX	2330	2830	7350	15600	4070	3160	3960	2320	1380	878	749	944
MIN	560	1100	1310	1600	1670	1460	1340	1230	884	648	555	490
CFSM	2.40	3.13	5.25	8.63	5.31	4.44	5.58	3.30	2.40	1.56	1.29	1.40
IN.	2.77	3.49	6.05	9.95	5.73	5.12	6.23	3.80	2.67	1.80	1.49	1.56
AC-FT	70780	89200	154600	254100	146400	130800	159100	97150	68270	45990	38020	39940

CAL YR 1979 TOTAL 633157 MEAN 1735 MAX 8480 MIN 560 CFSM 3.62 IN 49.17 AC-FT 1256000
WTR YR 1980 TOTAL 652576 MEAN 1783 MAX 15600 MIN 490 CFSM 3.72 IN 50.68 AC-FT 1294000

14210000 CLACKAMAS RIVER AT ESTACADA, OR

LOCATION.--Lat 45°18'00", long 122°21'10", in NE¼ sec.19, T.3 S., R.4 E., Clackamas County, Hydrologic Unit 17090011, on left bank 0.2 mi (0.3 km) downstream from River Mill Dam, 1.5 mi (2.4 km) northwest of Estacada, and at mile 23.1 (37.2 km).

DRAINAGE AREA.--671 mi² (1,738 km²).

PERIOD OF RECORD.--April 1908 to current year. Monthly discharge only April 1908, published in WSP 1318. Published as "near Cazadero" January 1909 to September 1957.

REVISED RECORDS.--WSP 1248: 1908-9, 1910(M), 1916, 1917(M), 1922(M), 1923. WSP 1288: Drainage area (former site). WSP 1638: 1919(M).

GAGE.--Water-stage recorder. Datum of gage is 296.93 ft (90.504 m) National Geodetic Vertical Datum of 1929 (levels by Portland General Electric Co.). See WSP 1738 for history of changes prior to Oct. 1, 1957. Oct. 1, 1957, to Feb. 16, 1965, water-stage recorder at same site at datum 2.00 ft (0.610 m) higher.

REMARKS.--Records excellent. Large diurnal fluctuations and some regulation caused by powerplants at River Mill Dam and, since 1958, North Fork Dam. Minor regulation since 1956 by Timothy Lake (see station 14208600). Two small diversions above station for Oregon City and Estacada municipal water supply.

AVERAGE DISCHARGE.--72 years, 2,744 ft³/s (77.71 m³/s), 55.53 in/yr (1,410 mm/yr), 1,988,000 acre-ft/yr (2.45 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 86,900 ft³/s (2,460 m³/s) Dec. 22, 1964, gage height, 18.36 ft (5.596 m); minimum, 50 ft³/s (1.42 m³/s) Mar. 10, 1961, from rating curve extended below 260 ft³/s (7.36 m³/s); minimum daily, 285 ft³/s (8.07 m³/s) Oct. 4, 5, 1958, caused by filling of North Fork dam forebay.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 15,000 ft³/s (425 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 4	1530	16,000	453	7.54	2.298	Jan. 14	1800	*29,800	844	*10.58	3.225

Minimum, 555 ft³/s (15.7 m³/s) Aug. 5, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	710	2070	1790	2580	2460	3800	2170	2980	2050	1120	758	746
2	700	1910	8020	2820	3390	3490	2070	2930	2210	1130	752	930
3	695	1760	8370	3170	5070	3340	1860	2780	2300	1080	746	972
4	730	1860	10800	3010	4460	3520	1770	2710	2130	1060	758	725
5	665	2130	8720	5580	3800	3690	2260	2850	2030	1110	665	730
6	585	2100	5500	5350	4000	3500	2870	2740	1950	1090	695	746
7	585	1890	4060	4110	4630	3290	2830	2550	1930	1010	764	746
8	585	1680	3230	3730	4060	3180	2660	2390	1890	1030	710	735
9	585	1620	2950	4950	3560	3060	4020	2370	1730	1010	725	660
10	580	1540	3610	3940	3220	3000	5020	2360	1660	994	715	665
11	580	1440	3100	3010	2720	3180	4380	2260	1600	965	700	640
12	606	1420	2960	15900	2720	2980	3730	2160	1580	958	700	685
13	908	1360	2780	23400	2600	3340	4060	2100	2430	944	700	685
14	854	1230	2640	25900	2800	3760	4820	2050	2660	908	675	675
15	1000	1290	2570	16200	2260	3520	5500	2030	2280	854	690	680
16	958	1320	2580	9650	2180	3060	4820	1850	2340	867	705	665
17	972	1670	2460	8190	2240	3000	4670	1790	1960	923	705	660
18	1330	2120	2520	6270	2340	3360	4420	1640	1400	874	781	799
19	3010	1920	2470	5260	2780	3310	4400	1640	1610	842	793	842
20	2780	1710	2610	4190	3110	3310	4690	1710	1620	854	752	781
21	2400	1490	3170	3580	3000	3110	5130	1660	1540	836	655	1100
22	1870	1600	3580	3220	2800	2900	4280	1780	1470	836	640	842
23	2390	2390	3030	2850	2750	2830	3820	1780	1410	823	640	830
24	2180	2670	2830	2850	2690	2740	3630	1680	1410	817	660	842
25	2580	3670	2610	2800	2610	2630	3520	1990	1880	805	655	836
26	2870	2690	2420	2740	4460	2580	3380	2770	1170	793	660	951
27	2800	2280	2170	2390	5110	2630	3450	2930	1360	793	645	1120
28	2610	2120	2120	2390	4780	2490	3840	2500	1250	769	700	1040
29	2370	1720	2010	2230	4740	2300	3760	2130	1210	769	655	1010
30	2130	1720	1870	2200	---	2280	3290	1880	1200	758	650	1020
31	2340	---	1800	2200	---	2240	---	1880	---	730	680	---
TOTAL	45958	56390	111350	186660	97340	95420	111120	68870	53260	28352	21729	24358
MEAN	1483	1880	3592	6021	3357	3078	3704	2222	1775	915	701	812
MAX	3010	3670	10800	25900	5110	3800	5500	2980	2660	1130	793	1120
MIN	580	1230	1790	2200	2180	2240	1770	1640	1170	730	640	640
CFSM	2.21	2.80	5.35	8.97	5.00	4.59	5.52	3.31	2.65	1.36	1.05	1.21
IN.	2.55	3.13	6.17	10.35	5.40	5.29	6.16	3.82	2.95	1.57	1.20	1.35
AC-FT	91160	111800	220900	370200	193100	189300	220400	136600	105600	56240	43100	48310

CAL YR 1979 TOTAL 865873 MEAN 2372 MAX 14500 MIN 580 CFSM 3.54 IN 48.00 AC-FT 1717000
WTR YR 1980 TOTAL 900807 MEAN 2461 MAX 25900 MIN 580 CFSM 3.67 IN 49.94 AC-FT 1787000

14211000 CLACKAMAS RIVER NEAR CLACKAMAS, OR

LOCATION.--Lat 45°23'36", long 122°31'54", in NE¼SW¼ sec.14, T.2 S., R.2 E., Clackamas County, Hydrologic Unit 17090011, on left bank 0.8 mi (1.3 km) upstream from Johnson Creek, 2.1 mi (3.4 km) southeast of Clackamas, and at mile 4.8 (7.7 km).

DRAINAGE AREA.--930 mi² (2,409 km²) at gage, 936 mi² (2,424 km²) at Gladstone Bridge 3.6 mi (5.8 km) downstream, where high-flow discharge measurements are made.

PERIOD OF RECORD.--September 1911 to April 1912 (published as "at Park Place"), October 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 50.68 ft (15.447 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Sept. 15, 1911, to Apr. 22, 1912, nonrecording gage at site 3.6 mi (5.8 km) downstream at different datum. Oct. 1, 1962, to Sept. 10, 1969, water-stage recorder at site 300 ft (91 m) downstream at present datum.

REMARKS.--Records good. Diurnal fluctuations and some regulation by powerplants and several storage dams upstream, operated by Portland General Electric Co. Small diversions above station for Estacada municipal water supply. All records given herein are for gage site.

AVERAGE DISCHARGE.--18 years, 3,638 ft³/s (103.0 m³/s), 53.12 in/yr (1,349 mm/yr), 2,636,000 acre-ft/yr (3.25 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 120,000 ft³/s (3,400 m³/s) Dec. 22, 1964, gage height, 27.0 ft (8.23 m), from floodmarks; minimum, 336 ft³/s (9.52 m³/s) Sept. 1, 11, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 16,000 ft³/s (453 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 2	1800	16,400	464	8.91	2.716	Jan. 14	1930	*39,300	1,110	*14.53	4.429
Dec. 4	1900	19,800	561	9.90	3.018						

Minimum, 634 ft³/s (18.0 m³/s) Oct. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	778	2410	2270	3050	3100	5000	2740	3580	2490	1340	849	831
2	784	2180	9760	3340	4880	4530	2600	3400	2880	1320	861	990
3	760	1980	11600	3930	7360	4210	2390	3230	3120	1310	855	1120
4	801	2150	14200	3740	6620	4290	2150	3070	2900	1260	879	813
5	760	2420	12200	7360	5630	4750	2670	3170	2600	1330	813	795
6	659	2390	7610	7380	5670	4770	3890	3140	2450	1280	772	784
7	659	2180	5580	5630	6640	4350	4140	2820	2350	1200	855	795
8	679	1900	4270	5720	5940	4080	3760	2600	2340	1180	813	807
9	664	1780	3630	12700	5150	3800	5470	2600	2120	1180	819	750
10	659	1690	4670	8350	4450	3670	7230	2610	1970	1150	813	709
11	654	1600	3870	5760	3760	4310	6450	2490	1870	1140	807	704
12	664	1550	3630	19300	3470	4270	5450	2390	1830	1100	784	719
13	898	1480	3340	31400	3320	4770	5520	2300	3040	1100	778	772
14	923	1390	3040	35900	3370	6690	6240	2260	4060	1050	801	740
15	1070	1390	2930	23300	2980	6430	6910	2270	3340	1040	745	745
16	1050	1430	2910	13800	2630	5260	6220	2060	3050	1000	825	745
17	1070	1740	2790	12000	2710	4860	5870	1970	2990	1070	778	714
18	1260	2440	3050	9320	2840	5430	5630	1820	1850	1030	855	778
19	3510	2370	2960	7740	3390	5300	5520	1780	2040	970	861	1000
20	3420	2030	3150	6360	3950	5130	5920	1790	2020	1010	886	879
21	3150	1840	3830	5320	3820	4710	6620	1800	1890	970	745	1200
22	2200	1830	4730	4590	3470	4190	5780	2020	1760	957	750	970
23	2450	3170	4060	4000	3490	3950	5070	2040	1700	943	735	923
24	2410	3470	3710	3800	3350	3720	4750	1890	1670	937	735	898
25	2680	5370	3270	3710	3280	3490	4570	2240	2300	917	745	898
26	3100	4370	2870	3530	5020	3350	4250	3950	1420	937	745	977
27	3100	3390	2570	3020	6450	3420	4290	4230	1570	910	730	1040
28	2990	3090	2380	2930	6120	3140	4670	3390	1550	879	766	1070
29	2760	2470	2230	2710	6150	2930	4710	2710	1450	873	755	1020
30	2490	2310	2120	2640	---	2930	4020	2310	1410	873	735	1040
31	2730	---	2120	2640	---	2780	---	2280	---	843	778	---
TOTAL	51782	69810	141350	264970	129010	134510	145500	80210	68030	33099	24668	26226
MEAN	1670	2327	4560	8547	4449	4339	4850	2587	2268	1068	796	874
MAX	3510	5370	14200	35900	7360	6690	7230	4230	4060	1340	886	1200
MIN	654	1390	2120	2640	2630	2780	2150	1780	1410	843	730	704
CFSM	1.80	2.50	4.90	9.19	4.78	4.67	5.22	2.78	2.44	1.15	.86	.94
IN.	2.07	2.79	5.65	10.60	5.16	5.38	5.82	3.21	2.72	1.32	.99	1.05
AC-FT	102700	138500	280400	525600	255900	266800	288600	159100	134900	65650	48930	52020

CAL YR 1979	TOTAL	1099883	MEAN	3013	MAX	20400	MIN	654	CFSM	3.24	IN	44.00	AC-FT	2182000
WTR YR 1980	TOTAL	1169165	MEAN	3194	MAX	35900	MIN	654	CFSM	3.43	IN	46.77	AC-FT	2319000

14211500 JOHNSON CREEK AT SYCAMORE, OR

LOCATION.--Lat 45°28'40", long 122°30'24", in lot 2, SW¼ sec.13, T.1 S., R.2 E., Multnomah County, Hydrologic Unit 17090012, on right bank 0.3 mi (0.5 km) southwest of Sycamore station, 2.5 mi (4.0 km) east of city limits of Portland, and at mile 10.2 (16.4 km).

DRAINAGE AREA.--26.5 mi² (68.6 km²).

PERIOD OF RECORD.--July 1940 to current year.

REVISED RECORDS.--WSP 1318: 1941(M). WDR OR-75-1: 1974.

GAGE.--Water-stage recorder and V-notch weir. Datum of gage is 228.47 ft (69.638 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those below 12 ft³/s (0.34 m³/s), which are fair. Slight diurnal fluctuation at low flow caused by recreational ponds upstream. Small diversions for irrigation above station.

AVERAGE DISCHARGE.--40 years, 54.5 ft³/s (1.543 m³/s), 26.25 in/yr (667 mm/yr), 39,490 acre-ft/yr (48.7 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,620 ft³/s (74.2 m³/s) Dec. 22, 1964, gage height, 14.68 ft (4.474 m); minimum, 0.08 ft³/s (0.002 m³/s) Aug. 21, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft³/s (14.2 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 2	1000	586	16.6	8.30	2.530	Jan. 12	1315	*2,210	62.6	*14.03	4.276
Dec. 4	1145	901	25.5	10.39	3.167	Jan. 14	1545	1,460	41.3	12.41	3.783
Jan. 9	0630	607	17.2	8.49	2.588						

Minimum, 0.33 ft³/s (0.009 m³/s) Aug. 19, Sept. 17, 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	19	35	271	45	80	25	12	9.6	5.3	1.1	1.7
2	3.0	13	436	168	227	61	21	11	9.6	5.1	.91	8.2
3	3.0	13	239	138	234	52	19	9.8	16	5.5	1.1	2.5
4	3.0	51	534	156	138	46	19	9.1	9.1	6.0	1.0	1.6
5	3.8	49	247	337	110	82	31	8.4	7.3	5.7	1.0	1.2
6	3.5	30	128	159	138	88	119	8.4	6.7	4.9	1.0	1.0
7	4.0	19	84	99	153	63	133	8.0	7.1	4.6	.91	1.4
8	4.0	15	61	131	102	51	94	8.0	8.6	4.6	.91	1.2
9	4.0	11	64	468	72	40	187	11	6.9	4.0	.91	1.0
10	4.6	9.6	80	224	53	43	172	8.2	6.2	4.1	.91	1.0
11	4.6	8.6	49	240	42	86	105	8.0	5.8	3.8	1.1	.91
12	4.9	8.0	45	1450	35	109	73	8.0	6.2	3.8	1.0	1.6
13	5.5	7.5	38	882	30	161	54	7.7	67	3.3	1.0	2.0
14	6.4	7.5	30	964	26	283	54	7.5	55	3.0	1.0	1.7
15	7.7	7.3	30	412	25	202	53	6.7	35	3.8	1.0	1.2
16	5.5	8.4	25	375	24	143	36	6.4	32	2.6	1.0	.91
17	5.7	15	48	317	32	119	30	6.0	33	2.5	1.1	.70
18	19	36	120	186	59	117	26	5.8	22	2.5	2.0	3.5
19	28	27	110	119	66	93	28	5.5	17	2.2	.91	3.5
20	16	18	114	85	60	85	40	5.5	15	2.2	1.1	9.8
21	11	15	200	67	45	68	48	7.1	13	2.0	1.0	5.7
22	8.2	51	119	52	40	54	35	12	11	1.7	1.0	2.6
23	11	83	127	43	51	49	30	8.9	11	1.6	1.0	1.7
24	10	85	159	37	44	45	27	6.7	11	1.6	1.0	1.2
25	29	104	89	34	49	39	24	6.4	12	1.6	1.1	1.1
26	11	109	64	30	108	38	21	14	9.3	1.6	.91	1.0
27	18	66	49	16	88	34	18	13	7.3	1.4	.91	1.1
28	20	44	39	14	150	28	16	7.3	6.6	1.7	1.2	1.1
29	25	32	32	13	112	29	14	6.4	6.0	1.2	1.0	1.0
30	28	28	38	13	---	28	13	5.8	5.7	1.1	1.2	1.0
31	40	---	127	15	---	26	---	5.8	---	1.1	3.5	---
TOTAL	350.7	989.9	3560	7515	2358	2442	1565	254.4	468.0	96.1	34.78	64.12
MEAN	11.3	33.0	115	242	81.3	78.8	52.2	8.21	15.6	3.10	1.12	2.14
MAX	40	109	534	1450	234	283	187	14	67	6.0	3.5	9.8
MIN	3.0	7.3	25	13	24	26	13	5.5	5.7	1.1	.91	.70
CFSM	.43	1.25	4.34	9.13	3.07	2.97	1.97	.31	.59	.12	.04	.08
IN.	.49	1.39	5.00	10.55	3.31	3.43	2.20	.36	.66	.13	.05	.09
AC-FT	696	1960	7060	14910	4680	4840	3100	505	928	191	69	127

CAL YR 1979 TOTAL 18629.60 MEAN 51.0 MAX 777 MIN 1.6 CFSM 1.93 IN 26.15 AC-FT 36950
WTR YR 1980 TOTAL 19698.00 MEAN 53.8 MAX 1450 MIN .70 CFSM 2.03 IN 27.65 AC-FT 39070

14211720 WILLAMETTE RIVER AT PORTLAND, OR
(National stream-quality accounting network station)

LOCATION.--Lat 45°31'07", long 122°40'00", in NW¼NE¼ sec.3, T.1 S., R.1 E., Multnomah County, Hydrologic Unit 17090012, in pier at east end of drawspan on upstream side of Morrison Bridge in Portland and at mile 12.8 (20.6 km).

DRAINAGE AREA.--11,100 mi² (28,700 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1972 to current year. Gage-height records collected in this vicinity since 1879 are in reports of the National Weather Service.

GAGE.--Acoustic velocity meter (AVM) with water-stage and velocity-index recorder. Datum of gage is 1.55 ft (0.472 m) National Geodetic Vertical Datum of 1929 (levels by National Weather Service).

REMARKS.--Water-discharge records excellent except those for October, April to September, which are poor. Flow regulated by many resevoirs upstream (see elsewhere in this report). Many diversions for irrigation above station.

AVERAGE DISCHARGE.--8 years, 31,980 ft³/s (906 m³/s), 23,170,000 acre-ft/yr (28.6 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 283,000 ft³/s (8,010 m³/s) Jan. 18, 1974; maximum gage height, 23.84 ft (7.266 m) Jan. 18, 1974; minimum daily discharge, 4,200 ft³/s (119 m³/s) July 10, 1978.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of June 7, 1894, and June 1, 1948, reached stages of 33.0 ft (10.06 m) and 30.0 ft (9.14 m), respectively, from information by U.S. Weather Bureau.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 217,000 ft³/s (6,150 m³/s) Jan. 14; maximum gage height, 13.54 ft (4.127 m) Jan. 15; minimum daily discharge, 7,000 ft³/s (198 m³/s) July 19 to Aug. 3, Aug. 5-15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11000	28600	34800	40700	38200	42300	22400	21000	14000	10000	7000	8000
2	11000	28900	48300	46100	39900	39100	21300	20000	15000	10000	7000	9000
3	11000	27700	74000	46100	48200	35500	20200	18000	16000	10000	7000	9000
4	11000	27500	94000	44400	48600	32400	19700	17000	17000	9000	8000	10000
5	11000	28400	104000	52100	42600	34200	21200	17000	18000	10000	7000	11000
6	11000	31400	99200	69100	38100	36400	28500	16000	17000	10000	7000	11000
7	11000	31300	88700	70400	41100	34600	37900	15000	17000	9000	7000	11000
8	11000	28200	73700	65000	41100	32900	35200	15000	17000	9000	7000	11000
9	11000	25200	60800	80100	38000	28400	38500	15000	16000	8000	7000	11000
10	11000	23200	52800	91300	33700	25800	46600	15000	15000	8000	7000	11000
11	11000	22000	46200	93700	29800	26700	52200	15000	14000	8000	7000	11000
12	11000	20800	42900	118000	27100	29200	49400	15000	13000	8000	7000	11000
13	11000	20000	40500	160000	26100	35100	44000	15000	14000	8000	7000	11000
14	11000	18900	38000	200000	25800	51000	42100	14000	17000	8000	7000	11000
15	12000	17700	37400	205000	24300	69000	42900	14000	17000	8000	7000	11000
16	12000	16600	35400	189000	25300	72100	40200	14000	16000	8000	8000	11000
17	12000	17200	33400	169000	23000	64900	37400	14000	15000	8000	8000	11000
18	13000	19500	36700	142000	22700	58100	36100	13000	13000	8000	8000	11000
19	18000	23900	41800	122000	31400	53700	34400	12000	13000	7000	8000	11000
20	26000	26500	45000	112000	35600	48600	35600	12000	12000	7000	8000	12000
21	28200	25100	48400	102000	34500	45300	38800	12000	12000	7000	8000	13000
22	27800	24700	55700	94200	32400	42000	41800	12000	11000	7000	8000	13000
23	26700	30000	56800	85000	31300	38400	38700	13000	11000	7000	8000	13000
24	26400	39200	60700	76400	30500	35300	35300	13000	11000	7000	8000	12000
25	25600	51300	61300	66100	31100	32700	32600	14000	12000	7000	8000	12000
26	27900	57800	52800	56600	31300	29500	29900	17000	11000	7000	8000	12000
27	29600	55200	45100	49600	38800	28100	27500	19000	12000	7000	8000	12000
28	29500	47600	39300	41000	43500	26500	27000	19000	12000	7000	8000	12000
29	28500	41400	35400	42000	44200	25100	26000	18000	11000	7000	8000	12000
30	27700	37100	32300	44000	---	24500	22900	16000	11000	7000	8000	12000
31	28000	---	32200	40900	---	23400	---	15000	---	7000	8000	---
TOTAL	552900	892900	1647600	2813800	998200	1200800	1026300	475000	420000	248000	234000	336000
MEAN	17840	29760	53150	90770	34420	38740	34210	15320	14000	8000	7548	11200
MAX	29600	57800	104000	205000	48600	72100	52200	21000	18000	10000	8000	13000
MIN	11000	16600	32200	40700	22700	23400	19700	12000	11000	7000	7000	8000
AC-FT	1097000	1771000	3268000	5581000	1980000	2382000	2036000	942200	833100	491900	464100	666500

CAL YR 1979 TOTAL 10883900 MEAN 29820 MAX 120000 MIN 6800 AC-FT 21590000
WTR YR 1980 TOTAL 10845500 MEAN 29630 MAX 205000 MIN 7000 AC-FT 21510000

14211720 WILLAMETTE RIVER AT PORTLAND, OR--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1975 to current year.
WATER TEMPERATURES: November 1975 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily recorded, 120 micromhos Feb. 8, 1977; minimum, 44 micromhos Dec. 3, 1975.
WATER TEMPERATURES: Maximum, 27.5°C July 29, Aug. 7, 8, 1978; minimum, 0.0°C Jan. 3-10, 1979.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily recorded, 116 micromhos July 31; minimum, 48 micromhos Jan. 14.
WATER TEMPERATURES: Maximum, 26.0°C July 26; minimum, 1.5°C Jan. 30 to Feb. 1.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW (CFS)	TEMPER-ATURE, WATER (DEG C)	PH FIELD (UNITS)	OXYGEN, DIS-SOLVED (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	SILICA, DIS-SOLVED (MG/L AS SIO2)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT												
24...	1330	264000	12.1	6.9	10.6	73	388	67	16	6.2	2.0	4.9
NOV												
09...	1200	25200	10.6	7.0	10.9	71	--	K15	15	5.9	2.0	4.4
DEC												
06...	--	99200	--	7.0	12.0	56	K510	455	14	5.2	1.9	3.6
JAN												
16...	1320	189000	7.2	5.0	13.4	51	410	446	13	4.6	1.5	3.2
FEB												
07...	1200	41100	5.8	5.8	12.6	82	196	97	16	6.7	2.6	5.2
APR												
09...	1400	38500	8.8	6.9	11.5	85	K762	371	15	7.1	2.5	4.6
MAY												
22...	1200	12000	15.2	6.6	10.0	94	260	185	15	7.9	2.8	5.5
JUN												
02...	1100	15000	14.2	7.0	12.5	78	280	28	14	6.2	1.8	4.7
JUL												
14...	1200	8000	19.3	7.2	9.2	84	--	--	16	7.2	2.4	6.0
AUG												
15...	1130	7000	21.3	7.4	8.4	90	K95	K4	15	7.2	2.4	6.2
SEP												
22...	1130	13000	16.3	7.6	9.0	84	248	K12	17	6.3	2.1	5.5

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
OCT												
24...	1.0	16	7.1	4.3	.1	.54	.52	.47	.130	.55	1.2	.050
NOV												
09...	.8	20	4.9	3.8	.0	.54	.29	.48	.070	.62	1.2	.050
DEC												
06...	.9	14	3.5	5.3	.0	.87	1.0	.82	.060	1.1	2.0	.090
JAN												
16...	.9	14	3.4	2.8	.1	1.1	.72	--	.060	.78	--	.040
FEB												
07...	.8	21	9.2	5.9	.0	.60	1.1	.41	.210	1.1	1.7	.030
APR												
09...	.8	20	6.0	9.1	.1	.47	.79	.22	.270	.95	1.4	.060
MAY												
22...	.8	21	7.2	7.2	.1	.70	.41	.52	.140	.52	1.2	.050
JUN												
02...	.8	17	4.2	4.5	.0	.48	.29	.39	.170	.32	.88	.040
JUL												
14...	.9	25	3.4	5.0	.1	.39	.49	1.1	.030	.49	1.6	.080
AUG												
15...	1.1	22	7.6	9.5	.1	.53	.42	.37	.120	.43	.92	.080
SEP												
22...	1.0	30	2.2	4.7	.1	.51	.37	.58	.020	.35	.95	.080

14211720 WILLAMETTE RIVER AT PORTLAND, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)	CARBON, ORGANIC TOTAL (MG/L AS C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	TUR-BID-ITY (NTU)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT												
24...	.080	2.6	.1	--	24	8	63	54	7.3	14	9980	95
NOV												
09...	.070	--	--	3.7	23	3	55	50	4.6	11	748	96
DEC												
06...	.130	--	--	6.0	21	7	47	47	27	86	23000	82
JAN												
16...	.210	2.1	1.4	--	18	4	48	41	38	106	54100	58
FEB												
07...	.090	--	--	2.4	27	6	68	64	6.6	21	2330	92
APR												
09...	.120	6.0	1.3	--	28	8	67	61	17	18	1870	94
MAY												
22...	.100	--	--	4.3	31	10	68	61	3.9	17	551	76
JUN												
02...	.060	--	--	2.5	23	6	54	48	2.3	--	--	--
JUL												
14...	.120	3.4	.4	--	28	3	82	58	2.4	11	238	84
AUG												
15...	.110	--	--	4.2	28	6	70	64	4.8	14	265	82
SEP												
22...	.100	--	--	2.7	24	0	66	59	2.8	12	421	81

DATE	IRON, DIS-SOLVED (UG/L AS FE)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	ARSENIC DIS-SOLVED (UG/L AS AS)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)
OCT										
24...	110	470	8	30	1	1	10	300	2	2
JAN										
16...	140	4500	30	130	2	4	10	0	5	<10
APR										
09...	230	1400	20	40	0	0	10	100	<3	6
JUL										
14...	60	510	10	50	2	2	10	0	1	5

DATE	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	SILVER, DIS-SOLVED (UG/L AS AG)
OCT									
24...	0	0	<3	0	0	5	0	6	0
JAN									
16...	10	20	<3	3	3	9	4	9	0
APR									
09...	0	10	<3	0	3	1	2	1	0
JUL									
14...	10	0	<3	0	5	10	3	31	0

DATE	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SELE-NIUM, TOTAL (UG/L AS SE)	MERCURY DIS-SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, DIS-SOLVED (UG/L AS NI)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)
OCT									
24...	0	9	0	0	0	--	--	0	3
JAN									
16...	0	20	50	0	0	--	--	4	8
APR									
09...	0	<3	30	0	0	--	.0	3	6
JUL									
14...	0	10	10	0	0	.0	.0	2	4

14211720 WILLAMETTE RIVER AT PORTLAND, OR--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO AUGUST 1980

DATE	NOV 9,79		APR 9,80		MAY 22,80		JUN 2,80		JUL 14,80		AUG 15,80	
TIME	1200		1400		1200		1100		1130		1130	
TOTAL CELLS/ML	390		790		8100		1400		2900		1900	
DIVERSITY: DIVISION	0.9		1.6		1.3		1.3		1.3		1.3	
.CLASS	0.9		1.6		1.3		1.3		1.3		1.3	
..ORDER	1.7		2.2		2.0		1.7		1.7		1.8	
...FAMILY	1.9		2.4		2.6		2.1		1.9		1.9	
....GENUS	2.4		2.7		3.1		2.5		2.7		2.8	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...HYDRODICTYACEAE												
....PEDIASTRUM	--	-	--	-	--	-	--	-	100	4	--	-
...MICRACTINIACEAE												
....GOLENKINIA	--	-	--	-	--	-	--	-	--	-	26	1
....MICRACTINIUM	--	-	--	-	340	4	--	-	--	-	--	-
...OOCYSTACEAE												
....ANKISTRODESMUS	43	11	13	2	69	1	39	3	120	4	39	2
....CHLORELLA	--	-	--	-	--	-	64	5	26	1	--	-
....DICTYOSPHAERIUM	--	-	--	-	270	3	--	-	--	-	--	-
....KIRCHNERIELLA	--	-	--	-	--	-	77	6	--	-	--	-
....OOCYSTIS	--	-	--	-	--	-	13	1	--	-	--	-
....TREUBARIA	--	-	--	-	--	-	--	-	*	0	--	-
...SCENEDESMACEAE												
....CRUCIGENIA	--	-	--	-	270	3	--	-	--	-	--	-
....SCENEDESMUS	29	7	--	-	210	3	150	11	--	-	130	7
....TETRASTRUM	--	-	52	7	--	-	--	-	51	2	--	-
..TETRASPORALES												
...PALMELLACEAE												
....SPHAEROCYSTIS	--	-	--	-	--	-	--	-	--	-	100	5
..VOLVOCALES												
...CHLAMYDOMONADACEAE												
....CHLAMYDOMONAS	43	11	65	8	69	1	13	1	64	2	77	4
CHRYSOPHYTA												
.BACILLARIOPHYCEAE												
..CENTRALES												
...COSCINODISCACEAE												
....CYCLOTELLA	100#	26	100	13	1200#	15	770#	56	190	7	420#	23
....MELOSIRA	110#	30	--	-	--	-	13	1	450#	16	590#	32
....STEPHANODISCUS	--	-	140#	18	1500#	19	--	-	1000#	35	150	8
..PENNALES												
...CYMBELLACEAE												
....CYMBELLA	--	-	13	2	*	0	13	1	--	-	--	-
...DIATOMACEAE												
....DIATOMA	--	-	--	-	310	4	--	-	--	-	--	-
...FRAGILARIACEAE												
....ASTERIONELLA	--	-	--	-	1900#	24	64	5	190	7	--	-
....HANNAEA	--	-	--	-	*	0	--	-	--	-	--	-
....SYNEDRA	--	-	--	-	69	1	26	2	*	0	26	1
...GOMPHONEMATACEAE												
....GOMPHONEMA	--	-	--	-	--	-	13	1	--	-	--	-
...NAVICULACEAE												
....NAVICULA	--	-	13	2	--	-	--	-	--	-	--	-
...NITZSCHIACEAE												
....NITZSCHIA	57	15	52	7	270	3	13	1	--	-	26	1
.CHRYSOPHYCEAE												
..CHRYSOMONADALES												
...MALLOMONADACEAE												
....MALLOMONAS	--	-	--	-	--	-	--	-	*	0	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..CHROOCOCCALES												
...CHROOCOCCACEAE												
....ANACYSTIS	--	-	13	2	*	0	90	6	660#	23	270	14
..HORMOGONALES												
...OSCILLATORIACEAE												
....OSCILLATORIA	--	-	310#	39	1400#	18	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)												
.EUGLENOPHYCEAE												
..EUGLENALES												
...EUGLENACEAE												
....EUGLENA	--	-	13	2	--	-	--	-	--	-	--	-
....TRACHELOMONAS	--	-	--	-	--	-	26	2	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)												
.DINOPHYCEAE												
..PERIDINIALES												
...GLENODINIACEAE												
....GLENODINIUM	--	-	--	-	--	-	--	-	--	-	13	1

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

14211720 WILLAMETTE RIVER AT PORTLAND, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)
JAN								
16...	1.2	3.3	1.4	3.4	1.5	3.4	.02	.01
JUL								
14...	<.9	<.4	.9	<.4	.9	<.4	.04	.06

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	72	85	89	69	80	85	77	77	94	108	---
2	78	73	79	93	69	78	86	77	78	93	109	---
3	79	75	73	94	75	77	85	78	76	91	---	---
4	79	73	66	92	77	77	86	82	77	87	106	92
5	80	72	61	88	78	79	88	85	81	92	---	91
6	81	73	57	85	79	79	88	87	83	91	107	90
7	81	72	58	79	80	79	87	88	81	90	107	89
8	80	69	61	74	81	79	86	92	76	91	108	89
9	81	69	64	72	80	79	87	92	74	92	108	88
10	84	72	67	74	79	79	79	93	75	96	103	86
11	86	77	70	73	80	82	73	94	77	98	104	84
12	86	79	72	69	82	83	67	95	77	96	103	83
13	86	79	72	61	84	84	64	97	79	94	103	84
14	83	80	74	51	87	84	65	98	79	96	102	83
15	82	81	74	50	89	81	64	97	76	99	101	82
16	85	81	76	52	89	72	63	94	79	102	100	82
17	86	83	77	54	90	66	64	92	80	105	99	82
18	88	86	78	56	92	69	63	92	81	108	99	82
19	89	89	79	57	94	71	66	94	80	109	100	82
20	85	92	85	55	96	71	67	96	82	108	99	81
21	82	89	86	55	89	70	67	98	82	109	99	80
22	82	88	86	56	86	72	68	99	82	111	98	81
23	74	91	86	57	83	73	71	98	84	112	98	80
24	72	92	82	59	82	73	73	98	87	113	96	80
25	72	93	83	62	84	75	73	100	88	---	93	79
26	72	88	83	69	82	77	71	101	88	---	94	78
27	73	85	84	70	80	77	70	97	88	---	95	77
28	74	87	84	73	82	78	73	89	90	97	---	78
29	73	89	86	78	80	80	75	88	93	---	---	78
30	74	88	87	75	---	82	76	84	95	---	---	78
31	72	---	87	68	---	84	---	79	---	107	---	---
MEAN	80	81	76	69	83	77	74	91	82	99	102	83

14211720 WILLAMETTE RIVER AT PORTLAND, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	18.0	17.0	12.0	11.5	7.0	6.5	6.5	6.5	2.0	1.5	8.5	8.0
2	17.5	17.0	11.5	11.5	7.0	7.0	7.5	6.5	2.5	2.0	8.5	8.0
3	17.5	17.0	11.5	11.5	8.5	7.0	7.5	7.5	4.0	2.5	8.0	7.5
4	18.0	17.0	11.5	11.0	9.5	8.5	7.5	7.5	4.5	4.0	8.0	7.5
5	17.5	17.0	11.5	11.0	9.5	9.0	7.5	7.0	5.5	4.5	8.5	8.0
6	17.5	17.0	11.5	11.5	9.5	9.0	7.0	6.5	6.0	5.5	8.0	7.5
7	17.5	17.0	11.5	11.5	9.0	8.5	6.5	6.0	6.0	6.0	8.0	8.0
8	17.0	17.0	11.5	11.0	8.5	8.0	6.0	5.0	6.0	6.0	8.0	7.0
9	17.0	17.0	12.0	10.5	8.5	8.0	5.5	5.0	6.5	6.0	8.0	7.5
10	17.5	17.0	12.0	10.5	8.5	8.0	5.5	5.0	6.0	6.0	8.0	7.5
11	17.0	17.0	10.5	10.0	8.5	8.0	5.5	5.5	6.0	5.5	8.0	7.5
12	17.0	16.5	10.0	10.0	8.0	7.5	5.5	5.0	5.5	5.5	8.0	7.5
13	16.5	16.0	10.0	9.5	7.5	7.0	6.5	5.5	5.5	5.5	---	---
14	16.0	15.5	9.5	8.5	7.5	7.0	7.0	6.5	5.5	5.0	7.5	7.5
15	16.0	15.5	9.0	8.5	7.5	7.5	7.5	7.0	5.0	4.5	7.5	7.0
16	16.0	15.5	9.0	8.5	7.5	7.5	7.5	7.0	4.5	4.5	7.0	6.5
17	15.5	15.5	8.5	8.5	8.0	7.5	7.5	7.0	4.5	4.5	7.0	7.0
18	15.5	15.0	8.5	8.5	8.0	8.0	7.0	6.5	4.5	4.5	7.5	7.0
19	15.5	15.0	8.5	8.0	---	8.0	6.5	5.5	5.0	4.5	7.5	7.5
20	15.0	14.0	9.0	8.5	9.0	---	5.5	5.0	6.0	5.0	8.0	8.0
21	14.0	13.0	9.0	8.0	9.0	9.0	5.0	5.0	6.5	6.0	8.5	8.0
22	13.0	12.5	8.0	8.0	9.0	8.5	5.0	5.0	6.5	6.0	9.0	8.0
23	12.5	12.0	8.0	7.5	8.5	7.5	5.0	5.0	6.5	6.0	9.0	8.0
24	12.0	12.0	7.5	7.5	8.0	7.0	5.5	5.0	6.5	6.0	8.5	8.0
25	13.0	12.0	7.5	7.5	7.0	7.0	5.5	5.0	6.5	6.0	9.0	8.5
26	13.0	13.0	8.0	7.5	7.0	7.0	5.5	5.0	7.0	6.5	9.0	9.0
27	13.5	13.0	8.0	7.0	7.0	7.0	5.0	4.5	7.5	7.0	9.5	9.0
28	13.5	13.0	7.0	6.5	7.0	6.5	4.5	3.5	8.0	7.5	9.5	9.0
29	13.0	13.0	6.5	6.5	6.5	6.5	4.5	2.0	8.0	8.0	10.0	9.5
30	13.0	12.5	6.5	6.5	6.5	6.0	2.0	1.5	---	---	10.0	9.5
31	12.5	12.0	---	---	6.5	6.0	1.5	1.5	---	---	9.5	9.0
MONTH	18.0	12.0	12.0	6.5	9.5	6.0	7.5	1.5	8.0	1.5	10.0	6.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.5	9.0	14.5	13.0	14.0	13.5	19.0	18.0	24.0	22.5	---	---
2	10.0	9.5	13.5	13.0	14.5	14.0	18.0	18.0	23.5	22.0	---	---
3	10.0	9.5	13.5	13.5	15.0	14.5	19.0	17.5	23.0	22.0	18.5	18.0
4	10.0	9.5	14.0	13.0	15.5	14.5	19.5	18.0	23.5	22.0	19.0	18.0
5	10.5	9.5	14.0	14.0	15.0	15.0	18.5	17.5	23.0	22.0	18.5	18.0
6	10.5	9.5	14.5	14.0	15.5	15.0	19.0	18.0	23.0	22.0	18.5	18.0
7	---	---	15.0	14.0	15.0	14.5	20.0	19.0	23.5	22.0	19.0	18.0
8	---	---	15.0	15.0	15.5	15.0	20.0	19.0	23.5	22.0	19.0	18.0
9	---	---	15.5	15.0	15.5	15.0	19.0	18.0	23.0	22.0	19.0	18.5
10	---	---	15.0	15.0	16.0	15.5	21.5	19.0	23.0	22.0	19.0	19.0
11	---	---	15.0	14.5	15.5	15.5	21.0	20.5	23.0	22.0	19.0	19.0
12	11.0	10.5	15.0	14.5	15.5	15.5	21.0	19.5	22.0	22.0	19.0	19.0
13	10.5	10.0	14.5	14.0	15.5	15.0	20.0	19.5	22.0	21.5	19.0	18.5
14	11.0	9.5	14.0	13.5	15.5	15.0	20.5	19.0	22.0	21.0	19.0	18.5
15	10.5	10.0	13.5	13.0	15.5	15.0	21.0	20.0	22.0	21.5	19.0	18.5
16	11.5	10.5	14.0	---	15.5	15.0	21.0	20.0	22.0	21.5	19.0	18.5
17	11.0	10.5	14.0	13.0	15.5	15.0	20.5	21.0	22.0	21.5	18.5	18.0
18	11.0	10.5	14.5	14.0	15.5	15.0	21.0	20.0	22.0	21.5	18.0	17.0
19	12.0	10.5	15.0	14.5	16.5	15.5	21.5	20.0	22.0	21.0	17.0	16.5
20	12.0	11.5	15.0	14.5	17.0	16.5	22.0	20.5	22.0	21.0	16.5	16.0
21	11.5	11.0	15.5	15.0	17.5	16.5	23.0	20.5	21.0	20.5	16.5	16.0
22	11.5	11.0	15.5	15.0	17.5	17.0	23.0	21.5	21.0	20.5	16.5	16.0
23	11.5	11.0	15.5	15.5	18.0	17.0	22.5	21.5	21.0	20.5	16.0	16.0
24	12.0	11.5	15.5	15.5	18.5	18.0	23.0	21.5	21.0	20.5	16.0	15.5
25	12.5	11.5	15.5	15.0	19.0	18.5	23.0	22.0	21.0	20.5	16.0	15.5
26	13.0	12.0	15.0	14.0	19.0	19.0	26.0	22.0	21.0	20.5	16.0	15.5
27	13.5	12.5	14.5	14.0	19.0	18.5	23.5	22.0	21.0	20.5	16.0	16.0
28	13.0	12.0	14.0	13.5	19.0	18.5	23.5	22.5	---	---	16.0	16.0
29	13.0	12.5	14.0	13.5	19.0	17.5	23.5	22.5	---	---	16.0	16.0
30	13.5	12.5	14.0	13.0	18.5	17.5	24.0	23.0	---	---	16.5	16.0
31	---	---	14.0	13.5	---	---	24.0	23.0	---	---	---	---
MONTH	13.5	9.0	15.5	13.0	19.0	13.5	26.0	17.5	24.0	20.5	19.0	15.5

14222880 COLUMBIA RIVER AT COLUMBIA CITY, OR

LOCATION.--Lat 45°53'41", long 122°48'23", in NE¼NE¼ sec.28, T.5 N., R.1 W., Columbia County, Hydrologic Unit 17080003, on left bank in Columbia City, at the pumping station at the corner of "E" Street and "The Strand", and at mile 84.0 (135.2 km).

DRAINAGE AREA.--254,000 mi² (657,900 km²), approximately.

PERIOD OF RECORD.--October 1971 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is at Columbia River datum, 0.79 ft (0.241 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Flow regulated by many reservoirs upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 19.68 ft (5.998 m) Jan. 19, 1974; minimum, -0.10 ft (-0.030 m) Sept. 9, 1973.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 11.68 ft (3.560 m) Jan. 16; minimum, 0.27 ft (0.082 m) Oct. 1.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	4.14	.27	2.04	5.10	1.95	3.44	6.13	3.08	4.44	7.28	3.88	5.44
2	4.24	.86	2.55	5.76	2.29	3.94	7.61	4.13	5.74	7.28	3.83	5.33
3	4.49	1.08	2.96	6.73	3.12	4.77	7.71	4.88	6.07	7.03	4.16	5.41
4	5.28	1.98	3.69	6.97	3.57	5.07	8.24	5.09	6.66	6.74	4.02	5.27
5	5.48	2.22	3.86	6.85	3.67	5.03	7.89	5.89	6.80	6.79	3.95	5.41
6	5.77	2.30	4.02	6.61	3.53	4.85	7.96	6.17	7.04	6.33	4.60	5.45
7	5.72	2.00	3.92	6.26	3.29	4.58	7.22	5.74	6.54	6.25	4.21	5.36
8	5.58	2.26	3.85	5.86	3.06	4.35	6.18	4.84	5.46	6.71	5.11	5.90
9	5.07	1.93	3.39	5.04	2.79	3.88	5.66	3.93	4.85	7.24	5.21	6.37
10	4.98	1.81	3.19	4.60	2.29	3.52	5.20	3.65	4.33	8.14	6.74	7.26
11	4.68	1.83	3.14	4.15	2.07	3.15	4.58	2.96	3.85	7.66	6.32	6.94
12	3.70	1.57	2.65	3.89	1.66	2.83	5.31	3.45	4.22	9.36	7.16	8.12
13	3.58	.58	2.19	3.92	1.52	2.68	5.77	3.55	4.51	9.77	8.33	8.94
14	3.80	.68	2.34	3.94	1.41	2.59	6.12	3.80	4.77	10.92	9.21	10.09
15	3.70	.85	2.37	4.29	1.35	2.68	6.39	3.89	5.01	11.61	10.46	10.93
16	3.88	1.09	2.55	5.04	1.81	3.26	5.69	3.13	4.32	11.68	10.43	10.93
17	3.77	.74	2.41	5.85	2.61	4.05	6.83	3.40	4.93	10.98	9.25	10.42
18	4.77	1.38	3.11	5.81	2.73	4.19	7.59	4.14	5.81	9.54	7.69	8.88
19	5.68	2.72	4.13	5.66	2.60	3.99	8.15	4.87	6.35	8.59	6.89	7.69
20	5.87	2.78	4.24	5.45	2.47	3.73	8.21	5.47	6.59	8.02	6.37	7.21
21	5.46	2.64	3.96	5.36	2.28	3.65	8.44	5.60	6.78	7.32	5.70	6.47
22	6.24	2.48	4.35	6.97	2.58	4.84	7.26	5.33	6.19	7.09	5.20	6.15
23	6.01	3.07	4.37	6.30	3.64	4.82	7.07	4.75	5.84	7.01	5.12	5.93
24	5.93	2.82	4.16	6.05	3.30	4.65	7.30	4.78	6.23	6.72	4.69	5.48
25	6.37	2.85	4.55	5.73	3.26	4.51	6.96	4.94	5.85	6.42	4.01	4.93
26	5.52	3.05	4.20	5.48	3.40	4.41	6.49	4.22	5.16	5.74	3.51	4.48
27	5.31	2.63	3.92	5.07	3.06	4.01	6.19	3.66	4.71	6.42	3.53	4.95
28	4.61	2.44	3.59	5.08	3.08	3.92	6.04	3.20	4.38	5.94	3.42	4.44
29	4.31	1.96	3.19	5.35	2.65	3.76	6.25	3.04	4.37	6.84	3.99	5.47
30	4.52	1.71	3.16	5.81	2.73	4.09	6.37	3.13	4.44	7.03	4.75	5.86
31	4.88	1.93	3.28	---	---	---	7.09	3.61	5.00	6.23	4.01	5.08
MONTH	6.37	.27	3.40	6.97	1.35	3.97	8.44	2.96	5.39	11.68	3.42	6.66

14222880 COLUMBIA RIVER AT COLUMBIA CITY, OR--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	6.95	4.18	5.47	6.77	4.41	5.54	4.75	2.19	3.39	7.72	5.90	6.77
2	7.03	4.18	5.43	6.68	4.13	5.35	4.81	2.07	3.35	7.49	5.79	6.55
3	6.64	4.16	5.36	6.46	3.93	5.16	4.87	2.06	3.39	7.45	5.86	6.57
4	6.04	4.07	5.00	6.22	3.77	5.02	5.05	2.21	3.52	6.92	4.92	5.86
5	5.74	3.67	4.57	6.89	4.47	5.86	5.32	2.52	3.91	6.52	4.71	5.57
6	6.01	3.18	4.65	6.91	4.95	5.83	5.50	2.58	3.92	6.44	5.02	5.73
7	5.46	3.49	4.35	6.55	4.56	5.39	4.64	2.04	3.27	7.03	5.65	6.24
8	5.11	3.25	4.10	5.98	3.50	4.60	4.67	2.31	3.43	7.49	6.21	6.69
9	5.34	3.45	4.18	4.93	2.58	3.59	5.61	3.52	4.45	7.58	6.23	6.95
10	4.78	2.59	3.53	4.81	2.47	3.48	5.49	3.77	4.62	7.73	6.26	7.00
11	4.77	2.35	3.34	5.08	2.75	3.70	5.91	4.05	4.98	7.82	5.95	6.80
12	5.36	2.61	3.77	5.75	3.48	4.32	5.86	3.06	4.53	7.96	6.14	6.97
13	6.47	3.63	4.76	7.57	4.99	6.36	5.86	3.12	4.46	8.07	5.87	6.83
14	6.63	4.15	5.22	7.46	5.17	6.14	6.37	3.25	4.84	8.08	5.40	6.51
15	7.40	4.17	5.76	7.10	4.46	5.99	6.73	3.56	4.92	7.94	5.18	6.33
16	7.03	3.85	5.52	6.55	4.17	5.31	6.69	3.48	5.18	7.39	4.85	5.97
17	6.98	3.54	5.08	7.03	4.09	5.46	7.46	4.49	5.65	7.31	5.24	6.13
18	7.65	3.67	5.70	7.18	4.60	5.74	6.77	3.88	5.17	6.97	4.71	5.92
19	7.46	4.40	5.97	6.92	4.20	5.33	6.96	4.17	5.36	6.58	4.28	5.45
20	7.33	4.44	5.68	6.51	3.74	4.87	6.16	3.51	4.72	5.65	3.37	4.58
21	6.94	4.02	5.39	6.03	3.28	4.42	5.40	3.64	4.51	5.46	4.40	4.80
22	7.04	4.52	5.61	5.17	2.66	3.76	5.50	3.93	4.77	6.37	4.50	5.08
23	6.17	3.43	4.75	4.52	2.23	3.30	5.93	4.31	5.17	6.86	5.02	5.56
24	5.55	2.88	4.02	3.89	1.78	2.84	6.27	5.09	5.58	7.07	6.08	6.51
25	5.37	2.66	3.86	4.02	1.70	2.89	6.61	5.10	5.89	7.35	5.25	6.21
26	6.03	3.24	4.34	4.01	1.67	2.76	6.40	4.08	5.16	6.83	5.21	5.93
27	6.74	4.22	5.34	3.95	1.45	2.86	5.99	3.29	4.65	7.23	5.44	6.19
28	7.33	4.75	6.05	4.46	1.84	3.15	5.83	3.66	4.74	7.44	5.93	6.67
29	6.79	4.66	5.67	4.93	2.30	3.49	6.27	4.26	5.36	7.79	6.23	6.92
30	---	---	---	4.57	2.09	3.31	7.05	4.88	6.33	7.90	6.37	7.25
31	---	---	---	4.76	2.08	3.44	---	---	---	8.64	7.18	7.90
MONTH	7.65	2.35	4.91	7.57	1.45	4.49	7.46	2.04	4.64	8.64	3.37	6.27

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	8.73	7.10	7.81	6.69	4.39	5.56	5.10	2.17	3.64	4.96	1.75	3.07
2	8.35	6.91	7.60	6.24	3.57	4.96	4.48	1.50	3.26	4.65	1.83	3.08
3	8.23	7.02	7.60	5.49	2.95	4.27	4.40	1.02	2.78	4.47	1.38	2.60
4	7.86	6.55	7.25	5.53	3.15	4.39	4.84	1.70	2.92	4.30	1.19	2.55
5	7.83	6.51	7.26	5.61	2.71	3.92	4.84	2.02	3.26	4.31	1.11	2.67
6	7.69	6.15	6.81	6.03	3.37	4.26	5.00	2.00	3.34	4.57	1.16	2.96
7	8.06	6.35	6.91	6.07	3.90	4.78	5.17	2.08	3.45	4.79	1.24	3.11
8	8.43	7.02	7.50	6.40	3.93	4.86	5.40	2.25	3.68	4.68	1.36	3.03
9	8.68	7.32	7.87	6.50	3.84	4.88	5.30	1.66	3.35	4.51	1.63	3.11
10	9.16	7.56	8.30	6.56	3.80	4.93	4.97	1.43	3.23	4.79	1.77	3.34
11	9.13	7.28	8.04	6.68	3.93	5.16	5.09	1.85	3.49	4.67	1.79	3.29
12	9.06	7.27	8.05	6.70	3.43	4.82	5.30	2.47	3.87	4.51	1.68	3.08
13	9.00	7.33	8.05	5.78	2.59	4.05	5.19	2.18	3.69	4.23	1.48	2.92
14	9.04	7.48	8.16	5.47	2.50	3.86	4.58	1.60	3.17	3.99	.86	2.56
15	8.90	7.33	8.01	5.16	2.26	3.74	3.75	.85	2.54	3.94	1.09	2.35
16	8.35	6.99	7.64	5.35	3.03	4.12	3.82	.84	2.36	3.81	.92	2.21
17	8.28	7.20	7.76	4.42	2.14	3.45	3.96	.87	2.29	4.07	1.17	2.43
18	8.60	7.60	8.04	4.37	1.88	3.10	3.93	1.30	2.49	4.14	1.45	2.63
19	8.80	8.03	8.36	4.09	1.65	2.90	4.20	1.47	2.47	4.36	1.36	2.76
20	8.80	7.48	8.12	4.21	1.63	2.66	4.08	1.34	2.48	4.48	1.32	2.96
21	7.93	6.13	6.80	4.83	1.86	2.83	4.11	1.24	2.53	4.69	1.11	2.88
22	7.44	5.99	6.62	4.93	2.70	3.60	4.29	1.28	2.59	4.68	1.19	2.91
23	7.27	6.18	6.69	5.06	2.50	3.50	4.26	.75	2.47	4.74	1.39	3.10
24	7.81	6.70	7.18	4.90	2.26	3.40	4.60	1.06	2.79	4.70	1.50	3.23
25	8.13	6.70	7.33	5.10	2.12	3.45	4.68	.93	2.95	4.91	1.67	3.32
26	8.37	6.90	7.55	5.08	2.00	3.45	4.93	1.74	3.44	5.81	1.91	3.89
27	8.47	6.65	7.42	5.30	2.05	3.55	5.39	2.22	3.81	5.74	2.49	4.08
28	8.07	5.39	6.61	5.12	1.74	3.52	5.19	2.10	3.71	5.66	2.35	3.87
29	6.87	4.12	5.38	5.32	1.82	3.58	5.15	1.94	3.56	5.37	2.44	3.74
30	6.35	3.77	4.99	5.34	2.32	3.78	5.07	1.82	3.39	4.76	1.98	3.25
31	---	---	---	5.20	2.26	3.75	4.97	1.93	3.32	---	---	---
MONTH	9.16	3.77	7.39	6.70	1.63	3.97	5.40	.75	3.11	5.81	.86	3.03
YEAR	11.68	.27	4.77									

14245295 COLUMBIA RIVER AT RAINIER, OR

LOCATION.--LAT 46°06'02", long 122°57'47", in SE¼SW¼ sec.8, T.7 N., R.2 W., Columbia County, Hydrologic Unit 17080003, on left bank at Rainier, 1.2 mi (1.9 km) downstream from Nice Creek, 500 ft (152 m) upstream from Interstate bridge, and at mile 66.1 (106.4 km).

DRAINAGE AREA.--256,700 mi² (664,900 km²), approximately.

WATER-STAGE RECORDS

PERIOD OF RECORD.--November 1971 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is at Columbia River datum, 0.34 ft (0.104 m) below National Geodetic Vertical Datum of 1929.

REMARKS.--Flow regulated by many reservoirs upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 16.52 ft (5.035 m) Jan. 19, 1974; minimum, 0.46 ft (0.140 m) July 6, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 11.27 ft (3.435 m) Jan. 16; minimum recorded, 0.64 ft (0.195 m) Aug. 23.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1				---	---	---	7.47	2.99	4.79	---	---	---
2				---	---	---	8.76	4.20	6.02	---	---	---
3				---	---	---	8.91	4.49	6.28	---	---	---
4				---	---	---	9.29	4.61	6.82	---	---	---
5				---	---	---	8.59	5.00	6.63	---	---	---
6				7.95	---	---	8.43	5.04	6.70	---	---	---
7				7.50	3.02	5.01	7.60	4.89	6.28	---	---	---
8				---	2.84	---	6.72	4.19	5.45	7.31	4.31	5.82
9				---	---	---	6.41	3.45	5.08	7.58	4.49	6.18
10				---	---	---	6.03	3.32	4.51	8.37	5.82	6.79
11				---	---	---	5.45	2.72	4.11	7.84	5.55	6.49
12				---	---	---	6.09	3.23	4.42	10.16	6.91	8.00
13				---	---	---	6.70	3.29	4.74	9.84	7.39	8.29
14				---	---	---	7.17	3.69	5.08	10.60	8.14	9.14
15				---	---	---	7.48	3.65	5.24	11.01	8.66	9.71
16				---	---	---	6.89	3.01	4.68	11.27	8.70	---
17				---	---	---	8.08	3.87	5.47	10.87	7.66	---
18				---	---	---	8.85	4.58	6.26	9.63	---	---
19				---	---	---	9.34	4.78	6.73	8.99	---	---
20				---	---	---	9.48	5.02	7.01	8.63	5.37	---
21				6.71	2.40	---	---	---	---	7.83	4.79	---
22				8.24	2.21	5.32	---	---	---	---	---	---
23				7.51	3.39	5.26	---	---	---	7.67	---	---
24				7.19	2.90	5.07	---	---	---	7.47	4.12	---
25				6.79	2.90	4.85	---	---	---	7.35	3.61	---
26				6.42	2.99	4.66	---	---	---	6.81	---	---
27				5.99	2.69	4.15	---	---	---	7.19	3.17	4.92
28				5.97	2.67	4.01	---	---	---	6.95	3.07	4.62
29				6.52	2.33	4.04	---	---	---	7.47	4.10	5.36
30				7.08	2.57	4.38	---	---	---	7.67	4.04	5.68
31				---	---	---	---	---	---	7.29	3.53	5.22
MONTH				8.24	2.21	4.68	9.48	2.72	5.62	11.27	3.07	6.63

COLUMBIA RIVER MAIN STEM

14245295 COLUMBIA RIVER AT RAINIER, OR--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	8.08	3.69	5.79	7.94	3.89	5.84				---	---	---
2	8.29	3.80	5.83	7.91	3.73	5.76				---	---	---
3	7.68	3.86	5.69	7.68	3.60	5.69				---	---	---
4	6.98	3.71	5.22	7.34	3.57	5.22				---	---	---
5	6.69	3.34	4.90	7.78	3.95	5.93				---	---	---
6	7.22	3.05	5.06	7.65	4.55	5.91				---	---	---
7	6.49	3.30	4.57	7.50	4.17	5.54				---	---	---
8	6.01	2.95	4.29	6.84	3.41	4.84				7.36	4.94	---
9	6.25	3.30	4.37	5.97	2.59	4.04				7.97	5.20	6.44
10	5.82	2.46	3.89	5.95	2.50	4.03				8.06	5.27	---
11	5.88	2.31	3.80	6.24	2.65	4.18				8.22	5.02	6.38
12	6.57	2.73	4.24	7.29	3.20	4.69				8.54	5.19	6.59
13	7.56	3.42	5.07	8.45	4.78	6.58				8.76	5.01	6.57
14	7.75	3.61	5.47	8.88	4.92	6.63				8.92	4.64	6.42
15	8.42	4.17	5.87	8.42	4.36	6.46				8.80	4.44	6.31
16	8.36	3.39	5.76	7.87	4.05	5.89				8.37	4.07	5.95
17	8.41	3.32	5.61	8.63	4.05	6.12				8.00	4.28	5.93
18	9.09	3.55	6.28	8.51	4.43	6.26				7.59	4.13	5.77
19	8.72	4.25	6.25	8.19	4.12	5.84				7.05	3.04	5.16
20	8.64	4.26	6.07	8.05	3.71	5.48				6.18	1.99	4.16
21	8.13	3.87	5.68	7.52	3.28	5.04				5.78	3.26	4.33
22	8.01	4.18	5.77	6.64	2.81	4.43				6.64	2.80	4.37
23	7.34	3.33	5.13	5.98	2.44	4.01				6.94	3.16	4.64
24	6.84	2.81	4.53	5.25	1.93	3.62				7.14	4.09	5.21
25	6.56	2.62	4.41	5.23	2.10	3.66				7.18	3.71	5.17
26	7.27	3.15	4.89	5.67	2.11	3.75				7.17	3.55	5.10
27	7.82	4.22	5.68	5.52	1.81	3.71				7.52	3.72	5.32
28	8.31	4.32	6.28	5.68	1.86	3.64				7.64	3.86	5.60
29	7.83	4.09	5.87	6.14	2.28	3.97				7.87	4.05	5.78
30	---	---	---	---	2.14	---				7.95	4.12	6.03
31	---	---	---	---	---	---				8.36	4.80	6.48
MONTH	9.09	2.31	5.25	8.88	1.81	5.06				8.92	1.99	5.62

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	8.53	4.74	6.51	7.43	3.11	5.16	6.44	1.55	3.91	6.23	1.56	3.51
2	8.16	4.53	6.33	7.17	2.43	4.79	6.02	1.37	3.65	5.88	1.57	3.47
3	7.88	4.58	6.25	6.68	2.00	4.40	5.77	1.17	3.25	5.51	1.15	3.04
4	7.38	4.20	5.95	6.74	2.30	4.47	6.15	1.39	3.25	5.46	.92	2.94
5	7.26	4.26	5.88	6.73	1.97	4.05	6.30	1.57	3.43	5.64	.84	3.07
6	7.58	3.99	5.62	7.00	2.40	4.12	6.28	1.47	3.48	5.96	1.06	3.38
7	7.99	4.15	5.65	7.32	2.72	4.43	6.40	1.43	3.66	6.25	1.07	3.44
8	8.63	4.83	6.16	7.36	2.72	4.56	6.68	1.63	3.91	6.04	.94	3.32
9	8.86	5.03	6.48	7.52	2.56	4.59	6.72	1.22	3.74	5.81	1.03	3.38
10	9.13	5.28	6.88	7.63	2.50	4.73	6.51	1.09	3.72	6.12	1.36	3.69
11	9.37	5.00	6.80	7.77	2.66	4.97	6.56	1.36	3.88	6.10	1.46	3.67
12	9.36	4.97	6.85	7.82	2.41	4.81	6.65	1.75	4.13	5.79	1.39	3.46
13	9.17	4.98	6.85	7.09	1.73	4.23	6.44	1.66	3.96	5.66	1.36	3.36
14	9.10	5.05	6.89	6.79	1.64	4.07	5.91	1.33	3.57	5.35	1.19	3.07
15	8.74	4.91	6.69	6.46	1.49	3.94	5.16	.89	3.09	5.26	1.06	2.86
16	8.18	4.63	6.38	6.35	2.00	4.10	5.11	.88	2.88	5.27	1.11	2.91
17	7.77	4.69	6.31	5.58	1.45	3.58	5.24	1.05	2.87	5.36	1.45	3.16
18	7.53	4.93	6.32	5.48	1.40	3.36	5.15	1.46	3.04	5.54	1.45	3.33
19	7.73	5.35	6.44	5.25	1.39	3.19	5.25	1.32	2.93	5.87	1.33	3.44
20	7.35	5.20	6.31	5.23	1.37	2.92	5.20	1.39	2.90	5.84	1.31	3.48
21	7.10	4.21	5.50	5.85	1.63	3.05	5.56	1.11	2.96	6.08	1.07	3.36
22	7.17	4.33	5.45	6.08	2.20	3.66	5.56	1.04	3.04	6.15	.95	3.31
23	7.35	4.29	5.58	6.08	1.87	3.56	5.72	.64	2.95	6.26	1.03	3.49
24	7.71	4.62	6.00	6.06	1.48	3.48	6.09	.75	3.22	6.25	1.07	3.60
25	8.19	4.65	6.23	6.31	1.39	3.54	6.19	.77	3.38	6.56	1.26	3.74
26	8.41	4.75	6.43	6.37	1.23	3.56	6.49	1.22	3.83	7.39	1.54	4.36
27	8.62	4.65	6.42	6.60	1.28	3.71	6.92	1.66	4.16	7.37	2.14	4.50
28	8.48	3.94	5.94	6.62	1.19	3.83	6.64	1.57	4.05	7.18	2.06	4.33
29	7.83	2.82	5.13	6.86	1.29	3.96	6.61	1.48	3.90	6.85	2.01	4.20
30	7.39	2.42	4.80	6.72	1.53	4.06	6.56	1.51	3.79	6.08	1.74	3.69
31	---	---	---	6.48	1.59	4.03	6.29	1.70	3.70	---	---	---
MONTH	9.37	2.42	6.17	7.82	1.19	4.03	6.92	.64	3.49	7.39	.84	3.49
YEAR	11.27	.64	4.86									

14247295 COLUMBIA RIVER AT WAUNA, OR

LOCATION.--Lat 46°09'40", long 123°24'30", in SE¼ sec.22. T.8 N., R.6 W., Clatsop County, Hydrologic Unit 17080003, on left bank at northeast end of Crown-Zellerbach wood-pulp processing plant at Wauna, and at mile 41.5 (66.8 km).

DRAINAGE AREA.--257,000 mi² (665,600 km²), approximately.

PERIOD OF RECORD.--November 1971 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is at Columbia River datum, 1.76 ft (0.536 m) below National Geodetic Vertical Datum of 1929.

REMARKS.--Flow regulated by many reservoirs upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 12.10 ft (3.688 m) Dec. 15, 1977; minimum, -0.65 ft (-0.198 m) Aug. 25, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 10.52 ft (3.206 m) Jan. 16; minimum, -0.65 ft (-0.198 m) Aug. 25.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	6.60	-0.26	3.18	7.31	.44	3.60	8.23	.99	4.23	9.28	1.18	5.25
2	6.84	-0.14	3.08	8.16	.59	4.11	9.39	1.35	5.16	9.25	1.05	5.20
3	7.38	-0.22	3.49	9.04	1.19	4.77	9.53	1.98	5.42	8.81	1.13	5.09
4	7.67	.29	3.86	9.24	1.10	4.99	9.70	1.70	5.76	---	---	---
5	7.89	.41	3.94	8.96	.93	4.93	8.81	1.50	5.23	---	---	---
6	8.33	.61	4.25	8.76	.77	4.83	8.48	1.72	5.18	---	---	---
7	8.45	.47	4.36	8.28	.80	4.63	7.78	1.46	4.91	---	---	---
8	8.04	.11	4.16	7.88	.76	4.59	7.06	1.33	4.47	7.52	1.70	4.89
9	7.60	.21	3.82	6.96	.74	4.16	6.80	1.04	4.45	7.83	2.12	5.20
10	7.37	.09	3.87	6.31	.52	3.95	6.40	1.28	3.83	5.35	3.40	5.28
11	6.83	.28	3.75	5.97	.68	3.60	5.95	.89	3.66	7.76	3.11	5.21
12	6.07	.38	3.55	5.80	.47	3.39	6.54	1.69	3.78	10.24	4.22	6.79
13	5.92	.28	3.47	5.89	.83	3.30	7.25	1.71	4.14	9.42	3.71	6.20
14	5.93	.57	3.53	5.99	.78	3.22	7.72	2.34	4.53	9.83	3.78	6.52
15	5.88	.59	3.35	6.53	.88	3.36	8.10	1.43	4.51	9.87	3.72	6.59
16	6.29	.43	3.30	7.40	.80	3.87	7.57	.85	4.08	10.52	3.71	6.83
17	6.36	.34	3.30	8.08	1.01	4.33	9.02	1.83	5.18	10.12	3.01	6.53
18	7.37	1.01	4.05	7.99	.63	4.33	9.64	2.03	5.68	9.45	2.12	5.81
19	8.07	1.64	4.74	7.79	.28	4.04	10.03	1.94	5.91	9.02	1.68	5.32
20	8.24	1.13	4.55	7.52	.07	3.82	10.15	1.98	6.02	8.81	1.53	5.23
21	7.65	.61	4.21	7.59	.14	3.86	10.08	1.84	6.12	7.98	1.38	4.89
22	8.74	1.38	4.94	9.12	1.17	5.08	8.75	1.32	5.33	7.81	1.35	4.59
23	8.29	.94	4.77	8.32	.94	4.94	8.81	1.29	5.44	7.82	1.40	4.43
24	8.37	1.16	4.71	7.90	.81	4.78	8.88	1.49	5.90	7.82	1.57	4.29
25	8.78	1.33	5.31	7.33	.85	4.50	8.42	2.08	5.19	7.92	1.34	4.22
26	7.72	1.44	4.85	6.95	.94	4.15	8.10	1.64	4.63	7.48	.89	3.86
27	7.42	1.11	4.58	6.44	.63	3.50	7.91	1.65	4.35	7.67	.82	3.96
28	6.57	1.01	4.15	6.34	.45	3.18	7.91	1.31	4.21	7.51	.61	3.89
29	6.25	.55	3.71	6.99	.45	3.34	8.25	.99	4.23	7.83	1.00	4.24
30	6.64	.47	3.68	7.65	.67	3.71	8.50	.71	4.45	7.95	.91	4.33
31	6.98	.51	3.62	---	---	---	9.42	1.31	5.15	7.90	.92	4.36
MONTH	8.78	-0.26	4.00	9.24	.07	4.10	10.15	.71	4.88	10.52	.61	5.15

14247295 COLUMBIA RIVER AT WAUNA, OR--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	8.71	1.27	5.10	8.53	1.88	5.03	6.67	.49	3.56	7.80	1.68	4.77
2	8.97	1.53	5.28	8.58	1.79	5.12	6.84	.39	3.62	7.91	1.43	4.60
3	8.23	1.37	5.03	8.18	---	---	7.06	.52	3.80	7.58	1.45	4.65
4	7.49	1.20	4.51	7.85	---	---	7.28	.65	4.05	7.82	1.40	4.75
5	7.18	1.23	4.41	8.28	2.91	5.45	7.60	1.20	4.60	7.63	1.21	4.65
6	7.88	1.45	4.67	8.10	2.43	5.20	7.78	1.25	4.54	7.19	1.24	4.43
7	6.96	1.48	3.93	8.03	2.14	4.99	6.75	.64	3.88	6.61	1.49	4.40
8	6.62	1.59	3.76	7.50	1.78	4.43	6.76	.80	4.15	---	---	---
9	6.73	1.68	3.76	6.83	1.24	3.95	7.25	1.55	4.68	7.99	2.12	4.90
10	6.52	1.09	3.59	6.78	1.18	4.05	6.96	1.06	4.26	8.30	2.22	4.80
11	6.68	.74	3.65	7.03	1.13	4.10	7.19	1.04	4.08	8.71	2.14	4.85
12	7.42	.80	3.98	8.11	1.30	4.46	7.47	.83	4.15	8.72	2.06	4.96
13	8.29	.95	4.50	8.95	2.09	5.84	7.81	1.15	4.40	9.01	1.80	5.06
14	8.45	.80	4.64	9.33	2.06	5.58	8.55	1.23	4.89	9.26	1.55	5.07
15	8.93	1.14	4.81	8.78	1.52	5.22	8.92	1.04	4.63	9.19	1.39	5.02
16	9.07	.99	4.91	8.55	1.25	4.84	8.75	.85	4.82	8.84	1.04	4.76
17	9.37	1.16	5.19	9.11	1.83	5.24	9.09	1.29	5.22	8.34	1.08	4.66
18	10.02	2.05	6.00	9.08	1.76	5.21	8.84	1.01	5.12	7.88	1.09	4.57
19	9.55	2.11	5.88	8.87	1.55	4.95	8.71	1.38	5.12	7.50	1.41	4.52
20	9.33	2.09	5.47	8.78	1.35	4.84	8.30	1.07	4.70	6.60	.72	4.07
21	8.88	1.80	5.11	8.15	.96	4.32	6.78	.95	4.00	6.10	2.48	4.12
22	8.57	2.06	4.95	7.30	.84	3.95	6.24	1.20	3.98	6.98	1.20	3.92
23	7.96	1.51	4.50	6.69	.69	3.66	6.71	1.47	4.05	7.17	1.42	3.95
24	7.61	1.18	4.28	5.95	.46	3.40	6.95	1.60	4.22	7.24	1.85	4.09
25	7.36	.96	4.22	6.15	.62	3.54	7.18	1.90	4.43	7.48	1.84	4.12
26	8.17	1.20	4.77	6.62	.73	3.75	7.23	1.75	4.36	7.80	1.41	4.22
27	8.47	1.82	5.18	6.27	.38	3.50	7.35	1.65	4.42	7.86	1.34	4.35
28	8.95	1.87	5.47	6.54	.41	3.47	7.52	1.31	4.30	7.93	1.18	4.43
29	8.29	1.57	4.90	6.79	.76	3.70	7.59	1.26	4.26	8.10	1.17	4.50
30	---	---	---	6.50	.52	3.43	7.49	1.33	4.60	8.17	1.13	4.67
31	---	---	---	6.73	.66	3.62	---	---	---	8.41	1.48	4.91
MONTH	10.02	.74	4.71	9.33	.38	4.44	9.09	.39	4.36	9.26	.72	4.56

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	8.54	1.57	5.03	8.00	.54	4.40	7.34	.10	3.83	7.45	.33	3.68
2	8.22	1.49	4.96	7.73	.38	4.25	7.26	.31	3.70	6.95	.40	3.56
3	7.88	1.43	4.87	7.41	.33	4.18	7.11	.45	3.41	6.69	.11	3.27
4	7.32	1.28	4.64	7.51	.55	4.23	7.22	.23	3.35	6.84	-0.20	3.20
5	7.23	1.39	4.54	7.51	.70	3.87	7.34	.31	3.47	6.84	-0.24	3.20
6	7.75	1.42	4.48	7.65	1.07	3.82	7.47	.06	3.45	7.03	-0.14	3.52
7	8.12	1.66	4.46	8.00	.93	3.91	7.40	-0.08	3.60	7.49	-0.04	3.70
8	8.80	2.19	4.82	8.16	.77	4.00	7.72	.03	3.71	7.12	-0.24	3.30
9	9.15	2.09	5.00	8.24	.55	4.03	7.83	-0.20	3.80	6.85	-0.21	3.50
10	9.48	2.08	5.26	8.32	.39	4.16	7.76	-0.27	3.70	7.16	.25	3.82
11	9.53	1.81	5.27	8.52	.44	4.34	7.67	-0.08	3.70	7.08	.41	3.79
12	9.51	1.65	5.25	8.53	.41	4.32	7.64	.10	4.01	6.89	.51	3.66
13	9.30	1.67	5.25	8.00	.00	3.95	7.33	.19	3.87	6.92	.56	3.69
14	9.19	1.64	5.26	7.65	-0.03	3.87	6.69	.14	3.62	6.58	.52	3.47
15	8.65	1.60	5.08	7.30	-0.10	3.79	6.30	.15	3.34	6.41	.35	3.31
16	8.12	1.45	4.89	6.91	.17	3.76	6.15	.07	3.12	6.42	.43	3.35
17	7.48	1.50	4.71	6.29	.04	3.44	6.39	.70	3.24	6.36	.69	3.51
18	6.83	1.62	4.50	6.28	.28	3.36	6.26	1.13	3.38	6.50	.72	3.65
19	6.92	2.01	4.45	6.15	.68	3.28	6.20	.56	3.21	6.86	.56	3.70
20	6.88	2.18	4.38	6.11	.93	3.08	6.24	.52	3.10	---	---	---
21	6.95	1.98	4.10	6.72	.81	3.23	6.60	.15	3.12	---	---	---
22	7.30	2.28	4.17	6.87	1.00	3.55	6.80	-0.18	3.02	---	---	---
23	7.77	1.97	4.36	6.90	.51	3.43	6.83	-0.48	3.06	---	---	---
24	8.13	1.95	4.70	6.92	.01	3.33	7.30	-0.54	3.25	---	---	---
25	8.30	1.82	4.89	7.22	-0.21	3.32	7.43	-0.65	3.35	---	---	---
26	8.48	1.73	4.98	7.31	-0.45	3.38	7.70	-0.40	3.55	---	---	---
27	8.70	1.57	4.93	7.57	-0.50	3.60	8.13	.03	4.10	---	---	---
28	8.68	1.14	4.72	7.80	-0.45	3.65	7.71	.06	3.95	---	---	---
29	8.28	.49	4.34	8.01	-0.32	3.80	7.70	.10	3.92	---	---	---
30	8.02	.20	4.22	7.75	-0.22	3.80	7.76	.42	3.86	---	---	---
31	---	---	---	7.30	-0.10	3.84	7.45	.46	3.77	---	---	---
MONTH	9.53	.20	4.75	8.53	-0.50	3.77	8.13	-0.65	3.53	7.49	-0.24	3.52
YEAR	10.52	-0.65	4.33									

14247400 COLUMBIA RIVER AT BRADWOOD, OR

LOCATION.--Lat 46°11'45", long 123°25'50", in SW¼NE¼ sec.9, T.8 N., R6. W., Clatsop County, Hydrologic Unit 17080003, at Bradwood, and at mile 38.9 (62.6 km).

DRAINAGE AREA.--257,100 mi² (665,900 km²).

PERIOD OF RECORD.--Water years 1974 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1976 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 22.5°C Aug. 12, 16, 17, 1977; minimum, 0.0°C on several days in January and February 1979.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 19.0°C Oct. 1-5; minimum, 1.0°C Jan. 30 to Feb. 3.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (DEG C)	PH FIELD (UNITS)	OXYGEN, DISSOLVED (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)
OCT									
19...	1400	16.5	7.6	9.0	160	--	15	.14	.36
NOV									
16...	1000	10.2	7.6	10.8	162	75	8	.36	.50
DEC									
14...	1200	7.4	7.7	11.4	146	53	12	.53	.54
JAN									
17...	1226	5.5	5.5	12.4	92	K320	23	.59	1.3
FEB									
11...	1200	3.2	7.2	9.8	150	116	7	.50	.40
APR									
10...	1400	8.2	7.5	11.8	152	33	5	.60	.28
MAY									
16...	1200	13.5	7.4	10.5	145	K23	17	.14	.52
JUN									
05...	1100	13.9	7.5	12.5	133	116	11	.10	.49
JUL									
17...	1200	18.2	8.2	9.4	134	80	14	.00	.78
SEP									
25...	1200	17.3	8.3	9.4	156	K27	13	.08	.51

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	CYANIDE TOTAL (MG/L AS CN)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
OCT									
19...	.140	.50	.64	.040	16	.00	10	0	50
NOV									
16...	.010	.51	.87	.050	11	.00	3	0	10
DEC									
14...	.010	.55	1.1	.060	10	.08	16	0	10
JAN									
17...	.030	1.3	1.9	.110	48	.00	6	0	50
FEB									
11...	.140	.54	1.0	.050	18	.00	2	0	40
APR									
10...	.060	.34	.94	.080	10	.00	4	0	30
MAY									
16...	.020	.54	.68	.070	41	.00	2	0	20
JUN									
05...	.020	.51	.61	.080	66	.00	2	0	30
JUL									
17...	.040	.82	.82	.050	107	.00	2	0	30
SEP									
25...	.000	.51	.59	.110	1	.00	3	0	50

14247400 COLUMBIA RIVER AT BRADWOOD, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	19.0	19.0	14.0	13.5	7.0	6.5	---	---	1.0	1.0	5.0	5.0
2	19.0	18.5	13.5	13.0	7.0	6.5	---	---	1.0	1.0	5.5	5.0
3	19.0	18.5	13.0	13.0	7.0	7.0	---	---	1.5	1.0	5.5	5.5
4	19.0	18.5	13.0	13.0	7.5	7.0	---	---	2.0	1.5	6.0	5.5
5	19.0	18.5	13.0	12.5	7.5	7.5	---	---	2.0	2.0	6.0	5.5
6	18.5	18.0	12.5	12.0	8.0	7.5	---	---	2.5	2.0	6.0	5.5
7	18.5	18.0	12.5	12.0	8.0	8.0	---	---	3.0	2.5	5.5	5.0
8	18.0	17.5	12.5	12.0	8.0	8.0	---	---	3.5	3.0	5.5	5.0
9	18.0	17.5	12.5	12.0	8.0	8.0	---	---	3.5	3.0	5.5	5.5
10	18.5	18.0	12.0	12.0	8.0	7.5	---	---	3.5	3.0	6.0	5.5
11	18.0	18.0	12.0	11.5	7.5	7.5	---	---	3.5	3.0	6.0	5.5
12	18.0	18.0	11.5	11.5	7.5	7.5	---	---	3.5	3.0	6.0	5.5
13	18.0	17.5	11.5	11.0	7.5	7.5	---	---	3.5	3.0	6.0	5.5
14	17.5	17.0	11.5	11.0	7.5	7.5	---	---	3.0	2.5	6.0	5.5
15	17.0	17.0	11.0	10.5	7.5	7.5	---	---	2.5	2.0	6.0	5.5
16	17.5	17.0	10.5	10.0	7.5	7.0	---	---	2.0	2.0	6.0	6.0
17	17.0	17.0	10.0	9.5	7.5	7.0	---	---	2.0	2.0	6.0	6.0
18	17.0	16.5	9.5	9.5	7.5	7.0	5.5	5.0	2.0	2.0	6.0	6.0
19	16.5	16.0	9.5	9.5	7.5	7.0	5.0	5.0	2.5	2.0	6.5	6.0
20	16.0	16.0	9.5	9.5	7.0	7.0	5.0	4.5	3.0	2.5	6.5	6.0
21	16.0	15.5	9.5	9.5	7.5	7.0	4.5	4.0	3.5	3.0	6.5	6.5
22	15.5	15.0	9.5	9.5	7.0	7.0	4.0	3.5	3.5	3.5	6.5	6.5
23	15.0	15.0	9.5	9.0	7.0	6.5	3.5	3.5	4.0	3.5	7.0	6.5
24	15.0	15.0	9.0	8.5	7.0	6.5	3.5	3.5	4.0	3.5	7.0	6.5
25	15.0	15.0	8.5	8.5	7.0	6.5	3.5	3.5	4.5	4.0	7.0	6.5
26	15.0	14.5	8.5	8.5	6.5	6.5	3.5	3.0	4.5	4.5	7.0	7.0
27	14.5	14.5	8.5	8.0	6.5	6.5	3.5	2.5	5.0	4.5	7.5	7.0
28	14.5	14.0	8.0	7.5	6.5	6.0	3.0	2.0	5.0	4.5	7.5	7.5
29	14.0	14.0	8.0	7.5	6.0	6.0	2.0	1.5	5.0	5.0	7.5	7.0
30	14.0	13.5	7.5	7.0	6.0	5.5	1.5	1.0	---	---	7.5	7.0
31	14.0	13.5	---	---	5.5	5.5	1.0	1.0	---	---	7.5	7.0
MONTH	19.0	13.5	14.0	7.0	8.0	5.5	5.5	1.0	5.0	1.0	7.5	5.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.5	7.0	12.5	12.0	14.0	13.5						
2	8.0	7.0	13.0	12.5	14.0	13.5						
3	7.5	7.5	13.0	12.5	14.0	13.5						
4	8.0	7.5	13.0	13.0	14.0	13.5						
5	8.0	8.0	13.5	13.0	---	---						
6	8.0	8.0	14.0	13.5	---	---						
7	8.0	7.5	14.0	13.5	---	---						
8	8.0	7.5	14.0	13.5	---	---						
9	8.0	8.0	14.0	13.5	---	---						
10	8.5	8.0	13.5	13.5	---	---						
11	9.0	8.5	14.0	13.5	---	---						
12	9.5	8.5	14.0	13.5	---	---						
13	9.5	9.0	13.5	13.0	---	---						
14	9.5	9.0	13.5	13.0	---	---						
15	10.0	9.5	14.0	13.5	---	---						
16	10.5	10.0	14.0	13.5	---	---						
17	10.5	10.0	13.5	13.5	---	---						
18	10.5	10.0	13.5	13.5	---	---						
19	10.5	10.5	13.5	13.5	---	---						
20	10.5	10.5	13.5	13.5	---	---						
21	10.5	10.5	13.5	13.5	---	---						
22	10.5	10.5	13.5	13.5	---	---						
23	11.0	10.5	13.5	13.5	---	---						
24	11.0	10.5	13.5	13.5	---	---						
25	11.0	10.5	13.5	13.5	---	---						
26	11.5	11.0	13.5	13.5	---	---						
27	12.0	11.5	13.5	13.0	---	---						
28	12.5	12.0	13.0	13.0	---	---						
29	12.5	12.0	13.5	13.0	---	---						
30	12.5	12.0	14.0	13.5	---	---						
31	---	---	14.0	14.0	---	---						
MONTH	12.5	7.0	14.0	12.0	14.0	13.5						

NEHALEM RIVER BASIN

14301000 NEHALEM RIVER NEAR FOSS, OR
(National stream-quality accounting network station)

LOCATION.--Lat 45°42'15", long 123°45'15", in NW¼ sec.35, T.3 N., R.9 W., Tillamook County, Hydrologic Unit 17100202, on right bank 0.2 mi (0.3 km) upstream from Cook Creek, 2.2 mi (3.5 km) northeast of Foss, and at mile 13.5 (21.7 km).

DRAINAGE AREA.--667 mi^2 (1,728 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 32.60 ft (9.936 m) National Geodetic Vertical Datum of 1929 (State Highway Department bench mark). Prior to Nov. 11, 1939, nonrecording gage.

REMARKS.--Water-discharge records excellent. No regulation. Several small diversions for irrigation and domestic use above station.

AVERAGE DISCHARGE.--41 years, 2,717 ft^3/s (76.95 m^3/s), 55.32 in/yr (1,405 mm/yr), 1,968,000 acre-ft/yr (2.43 km^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46,900 ft^3/s (1,328 m^3/s) Jan. 20, 1972, gage height, 23.11 ft (7.044 m); minimum, 34 ft^3/s (0.96 m^3/s) Aug. 29-31, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 19,000 ft^3/s (538 m^3/s) and maximum discharge, 24,400 ft^3/s (691 m^3/s) Jan. 12, gage height, 16.06 ft (4.895 m); minimum, 91 ft^3/s (2.58 m^3/s) Aug. 25-27, Sept. 13, 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	118	1570	1770	5180	2390	5430	2320	1100	468	303	121	107
2	116	1300	7160	5690	4050	4510	2160	1030	496	285	121	146
3	116	1900	7260	5610	6250	3810	2020	964	536	280	121	173
4	110	2070	12100	5150	5810	3280	1910	904	536	280	121	165
5	108	2360	9250	5240	5360	2990	2060	858	524	289	121	154
6	108	2040	7050	5190	7350	2930	2870	819	496	294	121	146
7	108	1720	5420	4600	9820	2800	3680	781	485	289	118	150
8	108	1410	4340	4700	8320	2580	4100	737	474	285	118	146
9	105	1170	3700	7950	6300	2400	5220	724	452	257	118	139
10	105	1000	3560	8550	4920	2260	5870	718	435	239	118	114
11	103	879	3260	7430	4000	2430	5550	694	425	235	111	98
12	103	776	3590	19700	3370	2920	4670	663	414	231	107	94
13	103	699	3810	20700	2960	5110	3840	640	403	226	101	94
14	110	637	4510	19300	2660	6430	3320	622	393	222	101	101
15	116	589	6490	16200	2470	6330	3170	610	388	218	98	101
16	124	555	6080	15200	2240	5810	2790	598	383	214	98	98
17	129	583	8110	13300	2140	5700	2460	581	378	205	98	94
18	166	680	11700	11000	3420	6600	2220	530	362	197	107	94
19	349	757	11600	8250	4800	6440	2090	502	347	189	111	114
20	566	705	11100	6380	4990	6060	2170	496	328	185	114	197
21	502	649	11200	5150	4580	5480	2330	485	318	181	107	257
22	518	1050	10400	4300	4000	4760	2170	496	308	173	101	214
23	1220	2280	8390	3690	3460	4190	1980	547	303	169	101	181
24	1060	2740	7330	3260	3190	3690	1830	553	303	165	101	173
25	2640	2930	7280	2950	3060	3260	1650	553	352	161	94	154
26	2760	3200	6360	2700	4250	3040	1500	570	388	154	91	135
27	4220	2990	5430	2440	6270	3010	1390	575	393	150	94	121
28	3220	2490	4650	2200	6850	2860	1300	575	393	143	107	118
29	2500	2080	4040	1910	6430	2690	1240	558	352	135	111	114
30	1930	1790	3590	1870	---	2610	1170	541	328	132	107	118
31	1680	---	3780	1850	---	2480	---	485	---	125	104	---
TOTAL	25221	45599	204310	227640	135710	124890	81050	20509	12161	6611	3362	4110
MEAN	814	1520	6591	7343	4680	4029	2702	662	405	213	108	137
MAX	4220	3200	12100	20700	9820	6600	5870	1100	536	303	121	257
MIN	103	555	1770	1850	2140	2260	1170	485	303	125	91	94
CFSM	1.22	2.28	9.88	11.0	7.02	6.04	4.05	.99	.61	.32	.16	.21
IN.	1.41	2.54	11.39	12.70	7.57	6.97	4.52	1.14	.68	.37	.19	.23
AC-FT	50030	90450	405200	451500	269200	247700	160800	40680	24120	13110	6670	8150

CAL YR 1979 TOTAL 760357 MEAN 2083 MAX 17000 MIN 103 CFSM 3.12 IN 42.41 AC-FT 1508000
WTR YR 1980 TOTAL 891173 MEAN 2435 MAX 20700 MIN 91 CFSM 3.65 IN 49.70 AC-FT 1768000

14301000 NEHALEM RIVER NEAR FOSS, OR--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- Water years 1975 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: December 1974 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 24.5°C Aug. 12, 1977; minimum, 0.0°C Jan. 8-10, 1977.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 23.0°C July 21; minimum recorded, 3.5°C Jan. 26.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	PH FIELD (UNITS)	OXYGEN, DIS-SOLVED (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	SILICA, DIS-SOLVED (MG/L AS SIO2)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT												
17...	1200	147	13.5	7.2	10.9	93	26	K11	15	7.6	1.9	7.2
NOV												
07...	1530	1670	9.2	7.4	10.6	66	--	K10	13	4.9	1.1	5.1
DEC												
10...	1300	3540	7.0	7.2	12.6	57	76	K101	15	4.3	1.2	5.0
JAN												
16...	1530	16100	--	--	--	46	97	81	14	3.2	.5	3.7
FEB												
05...	1300	4860	5.6	7.1	12.7	50	32	31	14	3.6	.9	4.1
APR												
14...	1600	3260	10.5	6.3	11.6	56	K14	77	14	3.8	1.1	4.2
MAY												
20...	1100	496	14.1	7.0	10.4	72	K3	K1	14	5.4	1.6	5.0
28...	1200	575	12.0	7.4	--	71	--	--	14	5.4	1.4	5.2
JUN												
03...	1100	530	11.7	7.4	12.1	64	K17	K6	14	5.3	1.3	5.2
12...	1400	273	14.0	7.4	--	71	--	--	14	5.6	1.5	5.3
14...	1500	393	13.5	7.5	--	71	--	--	14	5.3	1.4	5.3
19...	1400	347	16.9	7.5	--	58	--	--	14	5.7	1.7	5.7
26...	1400	388	15.0	6.9	--	75	--	--	14	6.0	1.4	6.0
JUL												
03...	1400	285	16.8	7.8	--	74	--	--	15	7.0	1.4	5.9
09...	1600	235	18.6	7.7	8.4	72	K7	K6	15	5.8	1.5	5.9
AUG												
05...	1430	121	19.0	8.3	9.6	87	K9	25	11	6.4	1.8	5.7
SEP												
16...	1330	98	17.8	7.0	10.7	88	K11	K13	11	7.0	1.8	6.3

14301000 NEHALEM RIVER NEAR FOSS, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)
OCT												
17...	1.2	30	8.9	7.3	.1	.39	.21	.29	.110	.19	.59	.020
NOV												
07...	.6	18	5.7	4.6	.0	.40	.81	.38	.020	.83	1.2	.010
DEC												
10...	.6	13	1.9	3.9	.0	.34	.86	.51	.020	.86	1.4	.030
JAN												
16...	.7	8	.5	3.7	.0	.36	.83	.87	.020	.78	1.7	.000
FEB												
05...	.6	11	2.5	3.8	.0	.18	.65	.15	.060	.68	.89	.030
APR												
14...	.6	12	3.9	4.0	.1	1.5	.58	--	--	.48	--	.060
MAY												
20...	.6	16	10	4.6	.0	.53	.18	.45	.060	.21	.72	.010
28...	.6	17	1.9	4.8	.0	.67	.23	.59	.110	.23	.93	.000
JUN												
03...	.7	17	2.4	4.8	.1	.23	.23	.26	.060	.20	.52	.010
12...	.7	16	1.7	4.7	.1	1.0	.88	.23	.030	.16	.42	.010
14...	.7	19	6.4	.1	.1	.46	.19	.97	.030	.46	1.5	.010
19...	.7	16	6.1	4.8	.1	1.0	.18	1.5	.060	.17	1.8	.020
26...	.8	16	3.8	8.8	.9	.36	.15	.38	.010	.10	.49	.030
JUL												
03...	.8	25	4.0	4.9	.1	.36	.23	.65	.040	.07	.76	.010
09...	.8	21	2.8	5.2	.1	.26	.15	.75	.010	.16	.92	.030
AUG												
05...	.9	25	3.9	6.6	.1	.49	.08	.36	.080	.08	.52	.020
SEP												
16...	.9	23	2.1	6.7	.1	.37	.07	1.6	.030	.07	1.7	.010

DATE	PHOSPHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)	CARBON, ORGANIC TOTAL (MG/L AS C)	HARDNESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	TUR-BID-ITY (NTU)	SEDI-MENT, SUS-PENDED (MG/L)	SEDIMENT DISCHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT												
17...	.030	2.7	.2	--	27	0	65	69	1.4	3	1.2	85
NOV												
07...	.020	--	--	3.9	17	0	54	49	2.6	9	41	66
DEC												
10...	.030	--	--	3.3	16	3	45	44	3.9	9	86	79
JAN												
16...	.130	2.4	1.6	--	10	2	48	35	32	153	6650	61
FEB												
05...	.070	--	--	2.4	13	2	42	39	11	26	341	87
APR												
14...	.050	2.1	.2	--	14	2	47	42	4.3	8	70	87
MAY												
20...	.020	--	--	2.5	20	4	56	52	1.1	3	4.0	--
28...	.020	1.1	.1	--	19	2	49	45	1.2	1	1.6	81
JUN												
03...	.010	--	--	2.9	19	2	50	45	.80	6	8.6	65
12...	.010	2.1	--	--	20	4	52	47	2.0	6	4.4	46
14...	.010	1.8	.2	--	19	0	53	46	2.5	6	6.4	56
19...	.030	2.4	--	--	21	5	55	49	.40	--	--	47
26...	.030	2.3	.3	--	21	5	53	52	1.2	4	4.2	70
JUL												
03...	.030	2.2	.1	--	23	0	56	55	.50	3	2.3	67
09...	.110	2.1	.2	--	21	0	71	51	1.1	2	1.3	64
AUG												
05...	.040	--	--	3.3	23	0	54	52	2.5	5	1.6	82
SEP												
16...	.020	--	--	4.9	25	2	53	50	2.1	9	2.4	84

14301000 NEHALEM RIVER NEAR FOSS, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BORON, DIS-SOLVED (UG/L AS B)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
OCT										
17...	0	0	10	--	--	--	1	0	0	--
JAN										
16...	1	1	8	100	--	--	<1	1	0	10
APR										
14...	0	0	8	<100	--	--	2	1	0	10
MAY										
28...	0	1	10	<100	--	--	1	1	0	10
JUN										
12...	2	1	10	<100	10	90	<1	1	0	0
14...	1	1	10	<100	--	--	3	1	0	0
19...	1	1	8	<100	--	--	<1	1	0	0
26...	2	2	8	<100	--	--	2	0	0	0
JUL										
03...	2	2	7	<100	--	--	<1	0	0	10
09...	2	2	10	<100	--	--	2	0	0	10

DATE	COBALT, DIS-SOLVED (UG/L AS CO)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT									
17...	<3	0	3	5	320	460	0	2	5
JAN									
16...	<3	4	0	21	120	5400	0	13	10
APR									
14...	<3	0	0	0	80	580	0	1	4
MAY									
28...	<3	0	5	12	150	290	5	7	2
JUN									
12...	<3	0	<10	3	140	360	<10	7	3
14...	<3	0	4	6	140	320	0	2	4
19...	<3	0	6	9	140	2100	1	4	5
26...	<3	0	3	4	130	320	0	1	3
JUL									
03...	<3	1	2	5	130	270	0	6	2
09...	<3	0	2	13	120	260	3	7	3

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SILVER, DIS-SOLVED (UG/L AS AG)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)
OCT									
17...	10	2	4	0	0	9	10	--	--
JAN									
16...	100	3	14	0	0	7	30	--	--
APR									
14...	20	2	8	0	0	<3	90	--	--
MAY									
28...	10	1	15	0	0	9	30	--	--
JUN									
12...	10	3	11	0	0	<3	30	20	140
14...	10	0	0	0	0	7	80	--	--
19...	10	3	0	0	0	<3	20	--	--
26...	20	5	5	0	0	3	50	--	--
JUL									
03...	10	2	4	0	0	3	20	--	--
09...	10	3	3	0	0	4	20	--	--

14301000 NEHALEM RIVER NEAR FOSS, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	LITHIUM DIS-SOLVED (UG/L AS LI)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SELE-NIUM, TOTAL (UG/L AS SE)	MERCURY DIS-SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)
OCT									
17...	--	--	0	0	--	--	--	--	--
JAN									
16...	--	--	0	0	.0	--	--	--	--
APR									
14...	--	--	0	1	.0	.0	--	--	--
MAY									
28...	--	--	0	0	.0	.0	--	--	--
JUN									
12...	<4	0	0	0	.0	.0	<1	37	<6.0
14...	--	--	0	0	.0	.0	--	--	--
19...	--	--	0	0	.0	.1	--	--	--
26...	--	--	0	0	.0	.0	--	--	--
JUL									
03...	--	--	0	0	--	.0	--	--	--
09...	--	--	0	0	.0	.1	--	--	--

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	ALDRIN, TOTAL (UG/L)	LINDANE TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)
NOV												
07...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB												
05...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MAY												
20...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AUG												
05...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

DATE	METH-OXY-CHLOR, TOTAL (UG/L)	PCB TOTAL (UG/L)	MALA-THION, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	DI-AZINON, TOTAL (UG/L)	METHYL PARA-THION, TOTAL (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)	METHYL TRI-THION, TOTAL (UG/L)
NOV											
07...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
FEB											
05...	ND	--	ND	ND	ND	ND	--	--	--	ND	ND
MAY											
20...	ND	--	ND	ND	ND	ND	--	--	--	ND	ND
AUG											
05...	ND	ND	ND	ND	ND	ND	--	--	--	ND	ND

DATE	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ETHION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)
NOV									
07...	ND	ND	ND	ND	ND	ND	ND	ND	ND

DATE	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	MALA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PARA-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-AZINON, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METHYL PARA-THION, TOT. IN BOTTOM MATL. (UG/KG)	TRI-THION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METHYL TRI-THION, TOT. IN BOTTOM MATL. (UG/KG)
NOV								
07...	ND	ND	ND	ND	ND	ND	ND	ND

14301000 NEHALEM RIVER NEAR FOSS, OR--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO AUGUST 1980

DATE	NOV 7,79	APR 14,80	MAY 20,80	JUN 3,80	JUL 9,80	AUG 5,80
TIME	1530	1600	1100	1100	1600	1430
TOTAL CELLS/ML	430	26	480	140	5500	23000
DIVERSITY: DIVISION	0.6	0.0	0.3	1.1	1.6	1.5
.CLASS	0.6	0.0	0.3	1.1	1.6	1.5
..ORDER	0.6	0.0	0.6	1.1	2.2	1.6
...FAMILY	1.5	1.0	2.3	1.1	2.5	1.7
....GENUS	1.5	1.0	2.5	1.1	2.9	2.1

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...MICRACTINIACEAE												
....GOLENKINIA	--	-	--	-	--	-	--	-	*	0	--	-
....MICRACTINIUM	--	-	--	-	--	-	--	-	100	2	--	-
...OOCYSTACEAE												
....ANKISTRODESMUS	--	-	--	-	--	-	--	-	75	1	1400	6
....CHLORELLA	--	-	--	-	--	-	--	-	750	14	--	-
....OICTYOSPHAERIUM	--	-	--	-	--	-	--	-	100	2	530	2
....SELENASTRUM	--	-	--	-	--	-	--	-	--	-	590	3
....TREUBARIA	--	-	--	-	--	-	--	-	--	-	*	0
...SCENEDESMACEAE												
....SCENEDESMUS	14	3	--	-	--	-	--	-	300	5	260	1
....TETRASTRUM	--	-	--	-	--	-	--	-	100	2	530	2
..TETRASPORALES												
...PALMELLACEAE												
....SPHAEROCYSTIS	--	-	--	-	--	-	--	-	--	-	530	2
..VOLVOCALES												
...CHLAMYDOMONADACEAE												
....CHLAMYDOMONAS	--	-	--	-	27	6	26#	18	280	5	*	0
CHRYSOPHYTA												
.BACILLARIOPHYCEAE												
..CENTRALES												
...COSCINODISCACEAE												
....CYCLOTELLA	29	7	--	-	--	-	--	-	1200#	21	860	4
....MELOSIRA	--	-	--	-	27	6	--	-	100	2	11000#	51
..PENNALES												
...ACHNANTHACEAE												
....ACHNANTHES	--	-	13#	50	27	6	--	-	--	-	--	-
...CYMBELLACEAE												
....CYMBELLA	--	-	--	-	96#	20	100#	73	--	-	--	-
...FRAGILARIACEAE												
....HANNAEA	--	-	--	-	220#	46	--	-	--	-	--	-
....SYNEDRA	--	-	--	-	14	3	--	-	--	-	--	-
...GOMPHONEMATACEAE												
....GOMPHONEMA	--	-	--	-	14	3	--	-	--	-	--	-
...NAVICULACEAE												
....NAVICULA	--	-	13#	50	27	6	--	-	--	-	--	-
...NITZSCHIACEAE												
....NITZSCHIA	--	-	--	-	27	6	--	-	--	-	*	0
CRYPTOPHYTA (CRYPTOMONADS)												
.CRYPTOPHYCEAE												
..CRYPTOMONADALES												
...CRYPTOCHRYSIDACEAE												
....CHROOMONAS	--	-	--	-	--	-	--	-	--	-	*	0
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..CHROOCOCCALES												
...CHROOCOCCACEAE												
....ANACYSTIS	--	-	--	-	--	-	13	9	1300#	23	6100#	27
..HORMOGONALES												
...OSCILLATORIACEAE												
....OSCILLATORIA	--	-	--	-	--	-	--	-	1200#	22	--	-
....PHORMIDIUM	190#	43	--	-	--	-	--	-	--	-	--	-
...RIVULARIACEAE												
....RAPHIDIOPSIS	200#	47	--	-	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)												
.EUGLENOPHYCEAE												
..EUGLENALES												
...EUGLENACEAE												
....TRACHELOMONAS	--	-	--	-	--	-	--	-	*	0	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

NEHALEM RIVER BASIN

14301000 NEHALEM RIVER NEAR FOSS, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	18.0	15.5	9.0	8.5	6.5	5.5	7.5	7.0	---	---	8.0	7.5
2	18.0	16.0	9.5	8.5	7.0	6.5	7.5	7.0	---	---	8.5	8.0
3	17.5	15.5	9.5	9.5	8.0	7.0	7.0	6.5	---	---	8.5	8.0
4	17.5	16.0	9.5	9.5	8.5	8.0	6.5	6.5	---	---	8.5	8.0
5	18.5	16.0	9.5	9.0	8.5	8.0	6.5	6.0	---	---	8.5	8.0
6	18.0	16.0	9.5	9.0	8.5	8.0	6.0	5.0	6.5	6.0	8.0	7.5
7	17.5	15.0	9.5	9.0	8.5	8.0	5.0	4.5	6.5	6.0	8.0	7.5
8	17.5	15.5	9.0	8.0	8.0	8.0	4.5	4.0	6.5	6.0	8.0	7.5
9	18.0	15.0	8.5	8.0	8.0	8.0	5.5	5.0	6.0	5.5	8.0	7.5
10	15.5	14.0	8.5	8.0	8.0	6.5	5.0	4.5	6.0	5.5	8.5	7.5
11	16.0	15.0	8.5	7.5	6.5	6.0	5.5	5.0	5.5	5.0	8.0	7.0
12	15.0	15.0	8.0	6.5	6.5	6.5	7.5	6.0	5.5	4.5	7.0	6.5
13	15.0	14.5	7.0	6.0	7.0	6.5	8.0	6.5	5.0	5.0	6.5	6.0
14	14.5	14.5	7.0	5.5	8.0	7.0	7.0	6.5	5.0	4.5	6.5	6.0
15	15.0	14.5	6.0	5.5	8.5	8.0	7.0	6.0	4.5	4.0	6.0	5.5
16	14.5	14.0	7.0	6.0	8.5	8.0	6.5	6.5	5.0	4.0	6.0	5.5
17	14.0	13.5	7.5	7.0	8.5	8.0	6.5	6.0	5.5	4.5	7.0	6.0
18	13.5	12.5	7.0	7.0	8.5	8.5	6.0	5.5	6.5	5.5	7.0	6.5
19	13.5	11.5	7.5	6.0	9.0	8.5	5.5	5.0	6.5	6.0	8.0	7.0
20	11.5	10.5	6.0	5.5	8.5	8.5	5.0	4.5	6.5	6.5	8.0	7.5
21	11.0	10.0	6.0	5.0	8.5	8.0	5.0	4.5	6.5	6.0	8.0	7.5
22	11.0	10.5	7.0	6.0	8.0	7.0	5.0	4.5	6.5	6.0	8.5	7.5
23	11.0	10.5	7.5	6.5	7.0	6.5	5.0	4.5	7.0	6.5	8.0	7.5
24	11.5	10.5	7.0	6.5	6.5	6.5	5.0	5.0	7.5	7.0	8.5	7.0
25	11.5	10.5	6.5	6.0	7.0	6.5	5.0	5.0	8.0	7.5	8.5	7.5
26	11.0	10.5	6.0	5.5	7.5	7.0	5.0	3.5	8.5	8.0	8.5	7.5
27	11.0	10.5	6.0	5.5	7.0	6.5	---	---	9.0	8.5	8.0	7.0
28	10.5	10.0	5.5	5.0	6.5	6.0	---	---	8.5	8.5	8.5	7.5
29	10.0	9.5	5.5	5.0	6.5	6.0	---	---	8.5	8.0	8.5	8.0
30	10.0	9.5	6.0	5.5	6.5	6.0	---	---	---	---	8.5	7.5
31	9.5	9.0	---	---	7.0	6.5	---	---	---	---	9.0	7.5
MONTH	18.5	9.0	9.5	5.0	9.0	5.5	8.0	3.5	9.0	4.0	9.0	5.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.0	8.0	14.0	12.5	13.5	12.5	19.5	16.0	21.5	20.0	17.0	16.5
2	9.0	7.5	14.0	13.0	12.5	12.0	18.5	17.5	21.0	20.0	17.0	16.5
3	8.5	7.5	14.5	12.0	12.5	11.5	18.0	16.0	20.0	19.0	17.5	16.5
4	9.5	8.0	14.5	13.0	14.0	11.0	16.0	15.0	20.0	18.0	17.5	17.0
5	9.0	8.5	13.5	12.5	13.5	12.5	17.0	15.0	19.0	18.5	18.0	17.0
6	8.5	7.5	14.5	13.0	12.5	12.0	18.5	15.0	20.0	18.0	18.0	17.0
7	8.0	7.0	15.0	13.0	13.0	12.0	20.0	16.5	19.5	19.0	18.0	17.5
8	8.5	7.5	14.0	13.0	13.5	13.0	20.5	17.5	20.5	19.0	18.5	17.0
9	8.5	7.5	13.0	12.5	14.5	13.5	20.0	18.0	20.5	19.5	18.0	17.0
10	9.5	7.5	13.0	12.0	14.5	14.0	18.0	17.0	20.5	20.0	18.5	17.5
11	9.5	8.0	13.0	12.5	15.0	14.5	18.0	17.0	20.5	19.5	19.0	17.5
12	10.5	8.5	13.0	12.5	14.5	14.0	19.0	16.5	20.0	18.5	18.5	18.0
13	11.0	9.5	13.5	12.0	14.0	13.0	18.5	17.5	20.5	19.5	18.0	17.0
14	11.0	10.5	14.0	12.0	14.0	13.0	19.0	17.5	20.0	19.0	18.0	16.0
15	11.5	10.0	13.5	12.0	16.0	13.0	20.0	17.5	19.5	19.0	18.0	16.0
16	11.5	9.5	14.0	12.0	15.5	14.5	20.0	19.0	19.0	19.0	18.0	16.5
17	11.5	10.5	15.5	12.5	15.0	14.0	20.5	18.5	19.5	19.0	18.0	16.5
18	11.5	10.5	15.5	14.0	16.5	13.5	21.0	19.0	19.5	18.5	17.5	16.5
19	11.5	11.0	15.5	14.0	18.0	15.0	20.5	19.5	19.5	18.5	17.0	16.0
20	11.0	10.5	15.0	14.0	17.0	16.0	21.5	18.5	19.5	18.5	17.0	15.0
21	11.5	10.0	14.5	14.0	16.0	15.0	23.0	20.5	19.5	18.5	17.0	15.0
22	12.0	10.5	14.0	13.0	16.0	14.5	22.5	21.0	19.5	18.5	17.0	14.5
23	12.0	10.5	13.5	12.5	16.0	15.0	21.0	20.0	19.5	18.5	17.0	15.0
24	12.0	10.5	13.0	12.0	15.5	15.0	21.0	18.5	19.0	18.5	17.0	15.5
25	11.5	10.0	12.5	11.5	15.0	14.5	21.5	19.5	18.5	18.0	16.5	15.5
26	13.0	10.5	11.5	11.0	15.0	14.5	22.5	20.0	18.0	17.5	16.5	15.5
27	14.0	11.5	12.0	11.0	15.5	14.5	22.5	20.5	18.0	17.0	16.0	15.5
28	13.5	12.5	12.5	11.5	16.5	15.0	22.5	21.0	18.0	16.5	16.0	16.0
29	12.5	11.5	12.5	11.5	17.0	15.5	22.0	20.5	17.5	16.5	16.5	15.5
30	13.5	11.5	12.5	11.5	18.0	15.0	22.0	20.0	17.0	16.5	17.0	15.5
31	---	---	13.5	12.5	---	---	21.5	20.5	17.0	16.5	---	---
MONTH	14.0	7.0	15.5	11.0	18.0	11.0	23.0	15.0	21.5	16.5	19.0	14.5

14301500 WILSON RIVER NEAR TILLAMOOK, OR

LOCATION.--Lat 45°29'05", long 123°41'20", in SW¼SE¼ sec.8, T.1 S., R.8 W., Tillamook County, Hydrologic Unit 17100203, on right bank 0.2 mi (0.3 km) upstream from Negro Jack Creek, 8.0 mi (12.9 km) east of Tillamook, and at mile 11.4 (18.3 km).

DRAINAGE AREA.--161 mi² (417 km²), at cableway, 2.0 mi (3.2 km) downstream, where all discharge measurements are made.

PERIOD OF RECORD.--October 1914 to September 1915, August to November 1916, July 1931 to current year. Prior to January 1915 monthly discharge only, published in WSP 1318.

REVISED RECORDS.--WSP 1398: 1953. WSP 1738: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 71.89 ft (21.912 m) National Geodetic Vertical Datum of 1929. Dec. 18, 1914, to Nov. 4, 1916, nonrecording gage at site 2.8 mi (4.5 km) downstream at different datum. July 30, 1931, to Sept. 30, 1938, nonrecording gage at site 2.82 mi (4.54 km) downstream at datum 28.83 ft (8.787 m) lower. Oct. 1, 1938, to Oct. 17, 1968, water-stage recorder at site 2.1 mi (3.4 km) downstream at datum 29.76 ft (9.071 m) lower.

REMARKS.--Records excellent except those for period of no gage-height record Aug. 17 to Sept. 30, which are fair. No regulation. Small diversions for domestic use above station.

AVERAGE DISCHARGE.--50 years (water years 1915, 1932-80), 1,202 ft³/s (34.04 m³/s), 101.39 in/yr (2,575 mm/yr), 870,800 acre-ft/yr (1.07 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 36,000 ft³/s (1,020 m³/s) Jan. 20, 1972, gage height, 16.91 ft (5.154 m); maximum gage height, 20.26 ft (6.175 m) Dec. 22, 1964 (site and datum then in use); minimum discharge, 32 ft³/s (0.91 m³/s) Sept. 5, 1973, but may have been less for short period following a landslide Jan. 31, 1965.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in February 1916 reached a stage of 20.8 ft (6.34 m), from floodmark, site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 12,000 ft³/s (340 m³/s) and maximum discharge, 16,300 ft³/s (462 m³/s) Jan. 12, gage height, 13.64 ft (4.157 m); minimum recorded, 59 ft³/s (1.67 m³/s) Oct. 11, but may have been less during period of no gage-height record Aug. 17 to Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77	634	725	2240	953	1710	933	451	320	155	82	70
2	74	549	4570	2050	2520	1430	860	424	350	150	81	97
3	70	716	2550	1840	3050	1220	800	407	260	160	81	80
4	66	953	5830	1630	2090	1070	791	387	251	190	81	68
5	66	1360	3450	1650	1690	1020	984	376	243	170	78	65
6	66	1110	2200	1460	3360	963	1520	361	238	150	75	65
7	66	860	1640	1290	3430	879	1410	350	234	140	75	70
8	66	691	1310	1540	2310	809	1480	340	226	140	73	67
9	65	578	1180	2920	1750	746	2420	335	219	140	73	64
10	62	493	1160	2530	1420	729	2500	331	214	140	70	61
11	62	436	1030	2120	1200	846	1980	317	207	134	66	60
12	62	392	1360	12100	1040	1010	1590	302	202	133	66	60
13	62	361	1480	8160	923	1550	1350	295	220	130	66	60
14	68	338	2450	6030	832	1570	1280	282	230	127	63	62
15	70	315	4040	4670	764	1460	1320	282	210	126	61	60
16	69	304	2840	5180	708	1320	1170	278	190	122	61	60
17	70	333	4190	4270	708	1510	1010	266	185	118	64	60
18	144	409	5670	2960	1590	1970	908	255	177	117	72	68
19	297	451	5120	2210	2040	1860	918	251	169	112	68	86
20	389	401	4450	1750	1740	2050	1030	243	170	111	65	150
21	270	369	4150	1460	1460	2020	979	240	165	108	62	105
22	253	654	3240	1260	1250	1760	894	270	160	103	60	90
23	827	1360	2240	1120	1100	1610	804	300	180	102	60	75
24	666	1320	2070	1010	994	1410	742	290	200	99	60	68
25	1070	1400	1840	913	999	1250	712	370	230	96	60	64
26	1130	1250	1660	813	1870	1220	627	390	210	92	60	62
27	2030	1050	1470	716	2440	1190	578	370	190	90	64	62
28	1340	889	1270	634	2500	1110	545	340	180	86	66	63
29	948	768	1210	604	2140	1110	510	320	170	85	60	64
30	782	699	1050	570	---	1090	480	310	160	83	60	65
31	755	---	1150	559	---	1020	---	290	---	82	70	---
TOTAL	12042	21443	78595	78259	48871	40512	33125	10023	6360	3791	2103	2151
MEAN	388	715	2535	2524	1685	1307	1104	323	212	122	67.8	71.7
MAX	2030	1400	5830	12100	3430	2050	2500	451	350	190	82	150
MIN	62	304	725	559	708	729	480	240	160	82	60	60
CFSM	2.41	4.44	15.7	15.7	10.5	8.12	6.86	2.01	1.32	.76	.42	.45
IN.	2.78	4.95	18.16	18.08	11.29	9.36	7.65	2.32	1.47	.88	.49	.50
AC-FT	23890	42530	155900	155200	96940	80360	65700	19880	12620	7520	4170	4270

CAL YR 1979 TOTAL 321053 MEAN 880 MAX 10100 MIN 62 CFSM 5.47 IN 74.18 AC-FT 636800
WTR YR 1980 TOTAL 337275 MEAN 922 MAX 12100 MIN 60 CFSM 5.73 IN 77.93 AC-FT 669000

14302800 MCGUIRE LAKE NEAR FAIRDALE, OR

LOCATION.--Lat 45°18'30", long 123°24'30", in NW¼SE¼ sec.15, T.3 S., R.6 W., Yamhill County, Hydrologic Unit 17100203, on control tower in reservoir on Nestucca River, 0.3 mi (0.5 km) upstream from Walker Creek, and 5.0 mi (8.0 km) southwest of Fairdale.

DRAINAGE AREA.--2.85 mi² (7.38 km²).

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by earthfill dam with ungated spillway. Capacity of resevoir is 3,840 acre-ft (4.73 hm³) between elevations 1,810.0 ft (551.69 m) and 1,865.5 ft (568.60 m). Dead storage negligible. Under normal operation, reservoir is filled in the spring (April or May) and drained when fall rains start. There is no planned storage during winter months; however, during periods of heavy runoff, inflow may be greater than capacity of outlet tunnel and there may be temporary storage. Water is used during summer months for municipal supply of city of McMinnville.

COOPERATION.--Elevation and capacity table furnished by city of McMinnville, Water and Light Department.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 3,890 acre-ft (4.80 hm³) Mar. 12 1972, Feb. 19, Mar. 28, 1974, elevation, 1,865.8 ft (568.70 m); no contents most of time during winter months.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 3,770 acre-ft (4.65 hm³) Jan. 18 to July 28, elevation, 1,865.0 ft (568.45 m); reservoir empty Nov. 18 to Dec. 3.

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept.30	1,854.3	2,440	-
Oct. 31	1,848.0	1,830	-610
Nov. 30	1,810.0	0	-1,830
Dec. 31	1,847.0	1,740	+1,740
CAL YR 1979	-	-	+1,125
Jan. 31	1,865.0	3,770	+2,030
Feb. 29	1,865.0	3,770	0
Mar. 31	1,865.0	3,770	0
Apr. 30	1,865.0	3,770	0
May 31	1,865.0	3,770	0
June 30	1,865.0	3,770	0
July 31	1,864.8	3,740	-30
Aug. 31	1,859.0	2,970	-770
Sept.30	1,854.6	2,470	-500
WTR YR 1980	-	-	+30

14302900 NESTUCCA RIVER NEAR FAIRDALE, OR

LOCATION.--Lat 45°18'40", long 123°25'05", in SW¼NW¼ sec.15, T.3 S., R.6 W., Yamhill County, Hydrologic Unit 17100203, on right bank 100 ft (30 m) upstream from former Meadow Lake, 0.4 mi (0.6 km) downstream from Walker Creek, 5.3 mi (8.5 km) southwest of Fairdale, and at mile 49.3 (79.3 km).

DRAINAGE AREA.--6.18 mi² (16.01 km²).

PERIOD OF RECORD.—June 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,778.99 ft (542.236 m) National Geodetic Vertical Datum of 1929 (levels by city of McMinnville).

REMARKS.--Records good. Flow regulated since March 1969 by McGuire Lake about 1 mi (1.6 km) above station (see station 14302800); during winter months lake is empty except when inflow exceeds capacity of outlet tunnel.

AVERAGE DISCHARGE.--20 years (water years 1961-80), 31.9 ft³/s (0.903 m³/s), 70.10 in/yr (1,781 mm/yr), 23,110 acre-ft/yr (28.5 hm³/yr), adjusted for storage and diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 876 ft³/s (24.8 m³/s) Dec. 22, 1964, gage height, 10.43 ft (3.179 m); minimum, 0.76 ft³/s (0.022 m³/s) Aug. 9, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 342 ft³/s (9.68 m³/s) Jan. 12, gage height, 5.77 ft (1.759 m); minimum recorded, 1.8 ft³/s (0.051 m³/s) July 28, 29, Aug. 22, but may have been less during period of no gage-height record Aug. 6-22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	52	32	53	28	52	27	15	6.6	3.8	2.0	2.3
2	3.4	52	100	43	52	44	25	14	7.5	3.6	2.2	3.1
3	3.6	54	60	34	52	40	23	12	7.2	4.4	2.2	6.9
4	3.6	57	60	33	43	35	28	12	6.9	6.1	2.0	9.1
5	3.6	66	43	34	39	36	39	12	6.6	5.1	2.0	9.1
6	3.6	85	32	29	52	33	52	12	6.3	4.6	2.2	9.1
7	3.6	81	25	25	47	29	48	11	6.3	4.4	2.2	9.1
8	3.6	78	20	45	42	27	62	11	6.1	3.8	2.0	9.4
9	3.6	75	20	79	37	24	89	14	5.8	3.6	2.0	9.4
10	3.6	72	17	53	33	25	92	13	5.5	3.4	2.0	8.7
11	3.6	68	15	47	30	29	72	11	5.3	3.1	1.9	8.1
12	3.6	66	31	227	28	33	57	11	5.1	3.1	1.9	8.1
13	3.6	61	25	173	25	50	45	11	5.3	2.7	1.9	8.1
14	3.8	58	27	117	23	49	45	9.8	5.8	2.9	1.9	8.1
15	3.8	53	32	76	22	44	45	9.4	5.5	2.9	2.0	7.8
16	3.8	46	28	69	21	39	41	9.1	5.1	2.9	2.0	7.8
17	3.8	31	36	54	23	44	35	8.7	5.1	2.7	2.1	7.5
18	7.2	17	45	53	66	47	30	8.4	4.6	2.7	2.3	7.8
19	16	18	52	54	63	47	31	8.1	4.4	2.6	2.3	8.1
20	18	12	67	50	51	55	39	7.5	4.2	2.6	2.2	8.7
21	15	11	83	43	42	55	34	7.8	4.2	2.4	2.2	7.8
22	16	38	58	38	37	50	31	9.1	4.2	2.3	2.2	7.5
23	22	45	45	34	34	46	28	9.8	4.2	2.2	2.2	7.5
24	22	51	42	31	34	41	26	8.4	7.2	2.2	2.2	7.2
25	43	51	35	28	41	37	24	8.4	9.1	2.0	2.2	7.2
26	47	41	31	26	76	38	21	8.1	7.2	2.0	2.2	7.2
27	52	32	27	23	77	36	20	8.4	5.8	1.9	2.2	7.2
28	45	27	23	20	73	32	18	8.1	5.1	1.9	2.2	7.2
29	47	23	20	19	63	30	17	7.5	4.8	1.9	2.2	7.2
30	55	22	19	18	---	30	15	6.9	4.6	1.9	2.2	7.2
31	55	---	47	18	---	29	---	6.6	---	1.9	2.3	---
TOTAL	521.8	1443	1197	1646	1254	1206	1159	309.1	171.6	93.6	65.6	229.5
MEAN	16.8	48.1	38.6	53.1	43.2	38.9	38.6	9.97	5.72	3.02	2.12	7.65
MAX	55	85	100	227	77	55	92	15	9.1	6.1	2.3	9.4
MIN	3.4	11	15	18	21	24	15	6.6	4.2	1.9	1.9	2.3
AC-FT	1030	2860	2370	3260	2490	2390	2300	613	340	186	130	455
MEAN†	10.8	17.3	66.8	86.0	43.3	38.9	38.7	9.97	5.70	2.93	1.46	1.93
CFSM†	1.75	2.80	10.8	13.9	7.01	6.29	6.26	1.61	.92	.47	.24	.31
IN.†	2.02	3.13	12.47	16.05	7.55	7.25	6.98	1.86	1.03	.55	.27	.35
AC-FT†	665	1030	4110	5290	2490	2390	2300	613	340	180	90	115

CAL YR 1979 TOTAL 7606.1 MEAN 20.8 MAX 127 MIN 3.1 AC-FT 15090 MEAN† 24.1 CFSM† 3.90 IN.† 52.90 AC-FT† 17430
WTR YR 1980 TOTAL 9296.2 MEAN 25.4 MAX 227 MIN 1.9 AC-FT 18440 MEAN† 27.0 CFSM† 4.37 IN.† 59.57 AC-FT† 19630

† Adjusted for storage and diversion by McGuire Lake.

14303600 NESTUCCA RIVER NEAR BEAVER, OR

LOCATION.--Lat 45°16'00", long 123°50'45", in SE¼NE¼ sec.36, T.3 S., R.10 W., Tillamook County, Hydrologic Unit 17100203, on right bank 150 ft (46 m) upstream from Saling Creek, 1.2 mi (1.9 km) southwest of Beaver, and at mile 13.5 (21.7 km).

DRAINAGE AREA.--180 mi^2 (466 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 43 ft (13 m), from river profile map.

REMARKS.--Water-discharge records excellent. No regulation. Small diversions for irrigation above station.

AVERAGE DISCHARGE.--16 years, 1,090 ft^3/s (30.87 m^3/s), 82.23 in/yr (2,089 mm/yr), 789,700 acre-ft/yr (974 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 29,400 ft^3/s (833 m^3/s) Jan. 11, 1972, gage height, 22.0 ft (6.71 m), from floodmark, minimum, 32 ft^3/s (0.91 m^3/s) Sept. 14, 1967.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Nov. 20, 1962, reached a stage of 23.4 ft (7.13 m), discharge, 32,500 ft^3/s (920 m^3/s) caused by failure of Meadow Lake Dam.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 8,000 ft^3/s (227 m^3/s) and maximum discharge, 10,200 ft^3/s (289 m^3/s) Jan. 12, gage height, 11.52 ft (3.511 m); minimum, 69 ft^3/s (1.95 m^3/s) Oct. 10-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	688	890	2010	867	1560	890	581	368	179	99	94
2	80	633	2650	1910	1450	1400	837	559	446	175	97	135
3	78	898	2170	1780	1650	1270	799	531	433	182	97	109
4	76	1010	4120	1700	1370	1140	807	504	397	225	97	94
5	74	1200	3180	1780	1250	1100	898	484	368	197	94	89
6	74	1060	2360	1570	1660	1020	1350	465	352	175	92	87
7	76	914	1850	1450	1610	922	1360	439	335	165	92	97
8	76	799	1510	1800	1460	859	1420	427	320	161	92	92
9	74	696	1390	4130	1310	807	2090	446	309	158	89	87
10	71	618	1350	3660	1170	792	2410	421	299	158	85	82
11	69	552	1150	3030	1050	938	2120	397	284	151	87	80
12	69	497	1350	7810	970	1160	1800	385	275	148	87	78
13	71	458	1320	8480	890	1920	1540	368	275	141	85	82
14	76	421	1450	6960	844	1970	1430	357	294	141	82	85
15	87	391	1730	5160	807	1840	1360	346	270	138	82	82
16	82	374	1590	4520	756	1640	1170	330	256	132	82	80
17	89	427	1890	3770	741	1680	1060	320	247	129	85	78
18	165	524	2640	3000	1530	1920	970	309	234	126	102	80
19	552	531	3060	2430	1640	1900	986	294	225	123	94	115
20	511	446	3230	2020	1510	1970	1070	284	217	123	87	234
21	280	403	3660	1720	1370	1870	986	284	213	120	82	175
22	261	844	3250	1490	1260	1690	914	320	209	115	80	129
23	748	1330	2790	1310	1170	1540	867	363	201	115	78	109
24	648	1460	2340	1170	1080	1380	852	357	234	112	78	102
25	986	1760	2100	1050	1050	1240	792	458	284	109	78	97
26	852	1630	1700	954	1440	1240	748	465	247	107	76	92
27	1360	1390	1450	867	1610	1170	712	452	221	104	87	89
28	1090	1190	1330	792	1780	1060	680	421	205	102	89	94
29	859	1040	1180	741	1720	1020	664	385	194	99	80	94
30	807	922	1090	696	---	986	618	357	186	99	80	97
31	807	---	1420	680	---	938	---	335	---	99	97	---
TOTAL	11230	25106	63190	80440	37015	41942	34200	12444	8398	4308	2712	3038
MEAN	362	837	2038	2595	1276	1353	1140	401	280	139	87.5	101
MAX	1360	1760	4120	8480	1780	1970	2410	581	446	225	102	234
MIN	69	374	890	680	741	792	618	284	186	99	76	78
AC-FT	22270	49800	125300	159600	73420	83190	67840	24680	16660	8540	5380	6030

CAL YR 1979 TOTAL 312729 MEAN 857 MAX 7900 MIN 69 AC-FT 620300
WTR YR 1980 TOTAL 324023 MEAN 885 MAX 8480 MIN 69 AC-FT 642700

14303600 NESTUCCA RIVER NEAR BEAVER, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1964 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 24.0°C July 1-3, 1967; minimum, 0.5°C Jan. 28-30, 1980.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 23.0°C July 21; minimum, 0.5°C Jan. 28-30.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	16.5	14.0	10.0	8.5	8.5	7.0	8.5	8.5	6.0	4.0	8.5	7.0
2	17.0	14.0	11.0	9.5	9.0	8.5	8.5	8.0	7.0	6.0	9.0	7.5
3	16.5	14.0	11.5	10.5	10.0	8.5	7.5	7.0	7.5	6.5	9.0	8.0
4	17.5	15.0	11.0	11.0	10.5	9.0	8.0	7.5	7.0	6.5	9.5	8.0
5	17.0	14.5	11.0	10.5	9.0	8.5	7.5	6.5	7.5	7.0	9.0	8.0
6	16.0	15.0	11.0	10.0	9.5	9.0	6.5	5.0	7.5	7.0	9.0	7.5
7	16.0	14.0	10.5	9.5	9.0	8.5	5.5	5.0	7.0	6.0	8.5	7.5
8	16.5	14.0	9.5	8.0	8.5	8.0	7.0	5.5	7.0	5.5	8.5	7.0
9	16.0	13.5	10.0	9.0	9.5	8.5	7.0	6.0	6.5	5.5	8.0	6.0
10	15.5	12.5	10.0	8.5	8.5	6.5	6.5	6.0	7.0	6.0	8.5	7.5
11	16.5	14.5	9.5	8.0	7.5	6.5	7.5	6.0	6.5	5.0	8.0	6.5
12	15.5	14.5	8.0	6.5	8.0	7.5	8.0	7.5	6.0	4.5	6.5	6.0
13	15.0	14.0	7.5	6.0	8.5	7.0	8.5	7.5	6.0	5.0	7.0	6.0
14	15.0	14.0	7.5	6.0	9.5	8.5	8.0	7.5	6.0	5.0	7.0	6.0
15	16.0	14.0	8.0	6.0	9.5	9.0	8.0	7.5	5.5	5.0	7.0	5.0
16	15.0	13.5	9.5	8.0	9.0	7.5	8.5	8.0	6.5	5.0	7.0	5.5
17	13.5	12.0	9.5	9.0	10.0	8.0	8.0	7.0	7.0	6.0	7.5	7.0
18	13.0	11.5	9.0	8.0	9.5	9.5	6.5	5.5	8.0	7.0	7.5	6.5
19	12.0	11.0	8.0	7.0	10.0	9.5	6.0	5.0	8.0	7.5	9.0	7.0
20	11.5	10.5	7.0	6.0	9.5	9.0	6.5	5.5	8.0	6.5	8.0	7.5
21	11.0	9.5	6.5	5.5	9.0	7.5	6.5	5.5	7.0	5.5	8.0	6.5
22	12.0	10.5	8.0	6.5	7.5	7.0	6.5	5.5	7.5	6.0	9.0	7.5
23	12.5	11.5	8.5	7.5	7.5	6.5	6.5	5.5	8.0	7.0	8.0	7.0
24	12.5	11.5	8.5	7.5	8.0	7.5	7.0	6.0	9.0	7.5	8.5	6.0
25	12.5	12.0	8.0	7.0	8.5	7.5	7.0	6.0	9.0	8.5	9.0	6.5
26	12.5	11.5	7.5	6.5	8.5	8.0	6.0	3.0	9.5	9.0	8.0	7.0
27	12.5	11.5	7.0	6.5	7.5	6.5	3.0	1.0	10.0	9.0	9.0	6.5
28	11.5	10.5	7.0	6.0	7.5	6.0	1.0	.5	9.5	8.5	8.0	6.5
29	11.0	10.0	7.5	6.5	8.0	7.0	1.0	.5	9.0	7.5	9.0	7.5
30	11.0	10.0	7.5	7.0	8.0	7.0	1.5	.5	---	---	8.5	6.5
31	11.0	9.5	---	---	8.5	7.5	3.5	1.5	---	---	8.5	7.0
MONTH	17.5	9.5	11.5	5.5	10.5	6.0	8.5	.5	10.0	4.0	9.5	5.0

14303600 NESTUCCA RIVER NEAR BEAVER, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.0	6.5	14.0	10.0	13.5	12.0	19.0	15.0	20.5	15.0	15.0	13.5
2	9.5	6.0	14.5	11.5	12.0	10.0	17.0	15.0	19.0	17.5	16.0	14.0
3	8.0	6.5	14.5	9.5	12.0	10.0	15.5	13.5	19.5	16.0	17.0	12.5
4	9.5	7.5	12.0	11.0	14.0	9.5	15.0	12.5	19.5	15.5	18.0	13.5
5	8.5	8.0	13.5	10.5	12.5	10.5	15.0	12.0	18.5	16.0	18.5	14.0
6	8.0	6.0	14.0	11.0	11.5	10.5	19.0	13.0	20.0	15.5	17.0	15.5
7	7.5	5.5	14.0	10.0	12.5	10.5	20.0	15.0	19.0	15.0	18.5	15.5
8	8.5	7.0	12.0	11.0	13.5	11.5	20.0	16.5	19.5	16.0	18.5	14.0
9	8.5	7.0	12.0	10.0	14.0	12.0	18.0	15.5	21.5	17.0	19.0	14.5
10	9.0	6.5	11.5	9.5	14.5	12.0	19.0	14.0	19.5	17.0	18.5	16.0
11	10.0	6.5	11.0	10.0	14.0	11.5	17.0	15.0	18.5	16.5	19.0	15.5
12	11.5	8.0	11.5	10.5	13.5	11.5	19.0	15.0	18.5	16.0	17.5	16.0
13	11.5	8.5	12.5	10.5	12.5	11.5	18.0	16.0	20.0	16.5	16.0	14.5
14	11.0	9.0	12.5	10.5	12.5	11.0	18.0	16.0	20.0	16.5	17.0	14.0
15	11.0	8.0	14.0	10.5	16.5	11.5	21.0	15.5	18.5	15.0	17.5	13.5
16	11.5	7.5	14.0	9.5	14.5	13.0	20.0	17.5	19.5	16.5	18.0	14.0
17	10.5	9.0	16.0	10.5	16.0	12.0	20.5	15.5	18.0	16.0	17.5	15.0
18	11.0	9.5	15.0	12.0	17.0	12.0	21.0	16.5	17.5	15.0	16.5	14.5
19	10.5	10.0	15.5	12.5	18.0	12.5	19.0	17.0	19.0	15.0	14.5	14.0
20	10.0	9.0	15.0	12.0	15.5	14.0	22.5	16.5	19.5	15.5	14.5	13.0
21	11.5	8.5	14.5	13.0	14.0	12.5	23.0	18.0	18.0	15.0	15.0	13.0
22	11.5	9.0	13.5	11.0	16.5	12.5	21.0	19.0	18.5	15.0	15.0	12.0
23	11.5	8.0	12.5	10.0	15.5	12.5	21.5	17.0	18.0	15.0	17.0	13.0
24	11.0	9.5	11.5	10.0	14.0	12.5	21.5	16.5	19.5	16.0	17.0	14.0
25	10.5	8.5	10.5	9.5	14.0	11.5	21.5	16.5	18.5	15.0	16.5	13.0
26	13.5	9.5	11.0	9.5	14.5	11.5	22.0	17.0	17.0	14.5	16.0	14.0
27	14.5	10.0	12.0	10.0	16.5	13.0	22.0	17.0	17.5	15.0	15.5	14.0
28	12.5	11.0	13.0	10.5	18.0	13.5	22.0	17.0	16.5	13.5	15.0	13.5
29	12.0	10.0	12.0	11.0	18.5	13.5	21.0	16.0	17.5	13.0	15.5	13.5
30	13.0	8.5	12.5	11.0	19.0	13.5	21.0	16.0	16.5	14.5	17.0	14.5
31	---	---	13.0	12.0	---	---	19.0	16.0	16.5	14.5	---	---
MONTH	14.5	5.5	16.0	9.5	19.0	9.5	23.0	12.0	21.5	13.0	19.0	12.0

14304850 BIG ROCK CREEK NEAR VALSETZ, OR

LOCATION.--Lat 44°46'41", long 123°41'34", in NE¼NW¼ sec.20, T.9 S., R.8 W., Polk County, Hydrologic Unit 17100204, on left bank about 0.2 mi (0.3 km) downstream from roadbridge and 4.7 mi (7.6 km) southwest of Valsetz.

DRAINAGE AREA.--6.90 mi² (17.9 km²).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: February 1979 to current year.

INSTRUMENTATION.--Temperature recorder since Feb. 27, 1979.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 19.5°C July 17-20, 1979, July 21, 1980; minimum, 0.0°C Jan. 28-30, 1980.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 19.5°C July 21; minimum, 0.0°C Jan. 28-30.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	14.0	10.5	9.5	8.0			---	---	5.0	3.5	8.5	6.5
2	15.0	10.0	10.0	9.5			---	---	6.0	5.0	9.5	7.5
3	14.5	11.0	---	---			---	---	7.5	6.0	8.5	7.5
4	15.0	12.5	---	---			---	---	7.5	6.0	9.0	7.5
5	14.5	11.0	---	---			---	---	7.5	6.5	9.0	7.5
6	13.5	13.0	---	---			---	---	7.5	6.5	8.5	7.0
7	13.5	12.0	---	---			---	---	7.0	5.5	8.5	7.0
8	13.5	11.0	---	---			---	---	7.5	5.5	9.0	7.0
9	14.5	12.0	---	---			---	---	6.5	5.5	9.0	6.0
10	13.0	9.0	---	---			---	---	7.0	6.0	8.0	7.0
11	13.5	10.5	---	---			---	---	6.5	4.5	7.0	6.0
12	12.5	11.0	---	---			---	---	6.5	4.0	6.0	4.5
13	13.0	11.5	---	---			---	---	6.0	4.0	7.0	5.5
14	13.0	12.5	---	---			---	---	5.5	5.0	6.5	5.5
15	13.5	12.5	---	---			---	---	5.5	4.5	7.0	5.0
16	12.5	11.0	---	---			---	---	6.0	4.5	7.5	5.5
17	10.5	8.5	---	---			---	---	7.0	5.5	7.5	6.5
18	10.5	10.5	---	---			---	---	7.5	6.5	8.0	6.0
19	10.5	9.5	---	---			---	---	8.0	7.0	8.5	6.5
20	10.0	8.0	---	---			---	---	8.0	6.5	8.0	7.0
21	9.5	8.0	---	---			---	---	7.5	5.0	8.0	6.0
22	10.0	8.0	---	---			---	---	7.5	6.0	8.5	6.0
23	11.0	10.0	---	---			---	---	8.0	6.5	8.5	6.5
24	11.0	11.0	---	---			6.0	---	8.5	7.0	9.0	5.5
25	11.5	11.0	---	---			6.0	5.0	8.5	7.5	9.0	5.5
26	11.0	11.0	---	---			5.0	2.5	9.0	8.5	8.0	6.5
27	11.0	10.5	---	---			2.5	1.0	9.5	8.5	8.5	5.5
28	10.5	8.0	---	---			1.0	.0	8.5	8.0	8.0	5.5
29	10.0	9.0	---	---			.5	.0	9.0	7.0	8.5	6.5
30	10.0	9.5	---	---			1.5	.0	---	---	8.5	5.5
31	10.0	9.0	---	---			3.0	1.5	---	---	8.0	6.0
MONTH	15.0	8.0	10.0	8.0			6.0	.0	9.5	3.5	9.5	4.5

14304850 BIG ROCK CREEK NEAR VALSETZ, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.0	5.5	13.0	8.0	12.0	10.5	16.5	12.5	17.0	12.5	---	---
2	9.5	4.5	12.5	9.5	10.5	9.5	14.0	12.0	16.0	15.0	---	---
3	8.0	5.0	13.0	7.5	11.0	9.0	12.5	11.5	16.0	13.0	---	---
4	8.5	6.5	11.0	9.0	12.5	8.5	12.0	11.0	16.0	12.0	13.5	---
5	7.5	7.0	11.0	8.0	10.5	9.0	13.0	10.5	14.5	12.0	14.0	11.0
6	6.5	5.0	11.5	9.5	10.5	9.5	15.0	10.5	15.0	10.5	14.0	12.5
7	7.5	5.5	11.5	7.5	11.0	9.5	16.5	12.0	15.5	12.0	14.5	13.0
8	8.0	6.5	10.5	8.5	12.0	10.0	16.0	13.5	16.5	14.0	14.5	11.0
9	8.0	6.5	10.0	9.0	12.5	11.0	14.5	13.0	17.5	13.5	15.0	12.0
10	9.5	6.5	9.5	8.0	12.0	11.0	15.5	12.0	16.5	13.5	14.5	13.0
11	10.5	6.5	9.5	9.0	12.5	10.0	14.5	12.5	15.5	14.5	15.0	13.0
12	12.0	7.0	10.0	9.0	11.5	10.0	15.5	12.5	15.5	14.0	14.5	12.5
13	11.5	7.0	11.0	9.0	11.0	10.0	16.5	13.0	15.5	14.0	12.5	12.0
14	9.0	7.5	10.5	8.0	11.5	9.5	15.5	14.0	15.0	12.0	13.5	11.5
15	11.0	7.5	10.5	8.0	13.5	10.0	17.5	12.5	14.0	13.0	13.0	9.5
16	12.0	6.5	12.0	7.0	12.5	12.0	18.0	14.0	15.0	13.5	13.0	10.0
17	10.0	7.5	13.5	8.0	14.5	10.5	17.5	13.0	14.5	13.5	13.5	11.5
18	10.5	7.5	13.0	9.5	15.0	11.5	17.5	14.0	15.0	12.0	12.5	12.0
19	9.5	9.0	13.5	10.5	15.5	11.5	17.0	14.0	14.5	10.5	12.5	11.5
20	9.0	8.0	13.0	10.0	14.0	12.5	19.0	14.0	14.0	11.5	12.0	10.5
21	10.0	7.5	12.5	10.5	12.5	11.0	19.5	15.5	15.0	11.5	12.0	9.0
22	10.0	8.0	10.5	9.0	13.5	11.0	17.5	16.0	14.0	12.5	11.5	9.5
23	11.0	7.0	11.0	8.5	13.5	11.5	18.5	14.5	14.5	10.5	12.0	9.5
24	10.5	8.0	9.5	8.0	12.5	11.0	18.0	14.0	13.0	10.0	12.0	11.0
25	10.5	7.0	9.5	9.0	12.0	10.5	18.0	13.5	13.0	11.0	12.0	11.5
26	13.0	8.0	10.0	8.5	12.0	10.0	18.5	13.5	13.5	12.5	12.0	11.5
27	14.0	8.0	10.5	9.0	15.0	11.0	19.0	14.5	13.5	10.5	12.5	11.5
28	11.5	9.5	11.5	9.0	16.0	11.5	18.5	14.5	14.0	12.5	13.5	12.5
29	11.0	8.0	11.5	9.5	15.5	11.0	17.5	13.0	14.0	10.0	14.0	11.5
30	12.0	6.5	13.5	10.0	16.0	11.0	17.0	13.5	13.0	10.5	---	---
31	---	---	13.0	11.0	---	---	16.5	14.0	---	---	---	---
MONTH	14.0	4.5	13.5	7.0	16.0	8.5	19.5	10.5	17.5	10.0	15.0	9.0

14305500 SILETZ RIVER AT SILETZ, OR

LOCATION.--Lat 44°42'55", long 123°53'10", in NW¼SW¼ sec.11, T.10 S., R.10 W., Lincoln County, Hydrologic Unit 17100204, on right bank, 1.8 mi (2.9 km) downstream from Baker Creek, 1.5 mi (2.4 km) east of Siletz, and at mile 42.6 (68.5 km).

DRAINAGE AREA.--202 mi^2 (523 km^2).

PERIOD OF RECORD.--October 1905 to November 1911, January to May 1912, January to June 1924, November 1924 to current year. Prior to December 1905 monthly discharge only, published in WSP 1318.

REVISED RECORDS.--WSP 1935: 1943, 1947-49(M), 1953-58(M).

GAGE.--Water-stage recorder. Datum of gage is 102.32 ft (31.187 m) National Geodetic Vertical Datum of 1929. Oct. 1, 1905, to Sept 30, 1938, nonrecording gage at various sites within 2.5 mi (4.0 km) downstream at different datums.

REMARKS.--Records excellent. Slight regulation from logponds. Small diversions above station for irrigation.

AVERAGE DISCHARGE.--61 years (water years 1906-11, 1926-80), 1,564 ft^3/s (44.29 m^3/s), 105.14 in/yr (2,671 mm/yr), 1,133,000 acre-ft/yr (1.40 km^3/yr).

EXTREMES FOR PERIOD OF RECORD (1905-12, 1924-38).--Maximum discharge, 34,600 ft^3/s (980 m^3/s) Nov. 22, 1909, gage height, 24.6 ft (7.50 m), site and datum then in use; minimum observed, 51 ft^3/s (1.44 m^3/s) Dec. 6, 7, 1929.

EXTREMES FOR PERIOD OF RECORD (1938-80).--Maximum discharge, 32,200 ft^3/s (912 m^3/s) Jan. 28, 1965, gage height, 27.32 ft (8.327 m), present site and datum; minimum, 48 ft^3/s (1.36 m^3/s) Sept 25, 26, Oct. 4, 1965, Sept. 28, 29, 1967.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Nov. 20, 1921, reached a stage of 31.6 ft (9.63 m), at site 2.5 mi (4.0 km) downstream at different datum, from floodmark, discharge, 40,800 ft^3/s (1,160 m^3/s), from rating curve extended above 17,000 ft^3/s (481 m^3/s).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 14,000 ft^3/s (396 m^3/s) and maximum discharge, 14,500 ft^3/s (411 m^3/s) Jan. 11, gage height, 14.99 ft (4.569 m); minimum, 73 ft^3/s (2.07 m^3/s) Oct. 11-14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	1270	1260	3190	1230	1950	943	670	298	218	126	107
2	82	1020	5560	2770	2430	1670	881	628	336	212	124	140
3	80	1160	6430	2400	3420	1470	839	592	352	215	124	128
4	79	1420	6300	2800	2380	1310	857	528	332	344	122	101
5	77	1960	3410	2510	1900	1250	975	504	309	288	117	95
6	77	1620	2550	2170	2440	1220	1610	485	298	254	117	91
7	77	1290	2010	2620	2330	1110	1700	458	298	237	115	91
8	77	1050	1750	6300	1980	1020	1960	440	295	225	113	93
9	77	866	1720	5590	1670	937	3220	467	284	221	113	88
10	75	743	1430	4210	1440	881	3990	449	277	218	109	84
11	73	651	1590	12000	1270	1010	3280	414	271	206	107	82
12	73	579	1570	12300	1140	1270	2540	401	264	203	107	82
13	73	526	1700	10600	1020	2840	2070	385	284	194	107	82
14	73	484	2490	7290	943	3050	1920	368	372	192	107	82
15	87	446	2270	5650	912	2800	2070	356	313	186	105	82
16	88	432	2320	4570	839	2370	1700	344	288	181	103	80
17	86	516	3730	3510	810	2240	1470	332	281	178	103	78
18	220	773	4600	3000	2340	2610	1280	321	267	172	105	76
19	650	975	4720	2550	3090	2420	1370	309	257	170	109	94
20	600	816	6080	2200	2420	2340	1590	298	247	167	103	210
21	465	724	5370	1850	1980	2200	1600	295	244	164	99	170
22	350	1160	4140	1550	1740	1930	1480	325	244	157	95	120
23	718	2120	3530	1440	1700	1740	1320	360	237	154	95	105
24	737	2320	2960	1140	1570	1530	1240	329	254	152	93	96
25	1370	2790	2520	1070	1530	1370	1100	344	309	147	91	92
26	1320	2670	2130	968	1970	1340	987	360	277	144	91	88
27	1780	2250	1830	863	2270	1270	900	376	254	140	91	88
28	1690	1860	1600	787	2490	1150	833	360	241	135	105	90
29	1310	1540	1450	719	2280	1090	781	336	231	133	97	90
30	1170	1380	2080	694	---	1040	719	321	221	128	91	90
31	1670	---	4130	663	---	994	---	306	---	126	103	---
TOTAL	15389	37411	95230	109974	53534	51422	47225	12461	8435	5861	3287	2995
MEAN	496	1247	3072	3548	1846	1659	1574	402	281	189	106	99.8
MAX	1780	2790	6430	12300	3420	3050	3990	670	372	344	126	210
MIN	73	432	1260	663	810	881	719	295	221	126	91	76
CFSM	2.46	6.17	15.2	17.6	9.14	8.21	7.79	1.99	1.39	.94	.53	.49
IN.	2.83	6.89	17.54	20.25	9.86	9.47	8.70	2.29	1.55	1.08	.61	.55
AC-FT	30520	74200	188900	218100	106200	102000	93670	24720	16730	11630	6520	5940

CAL YR 1979 TOTAL 446786 MEAN 1224 MAX 12400 MIN 73 CFSM 6.06 IN 82.28 AC-FT 886200
WTR YR 1980 TOTAL 443224 MEAN 1211 MAX 12300 MIN 73 CFSM 6.00 IN 81.62 AC-FT 879100

14305500 SILETZ RIVER AT SILETZ, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: February 1979 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 24.5°C July 18-20, 1979; minimum, 0.0°C Jan. 28-30, 1980.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 23.5°C July 21, 27; minimum, 0.0°C Jan. 28-30.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	17.0	15.0	9.5	8.5	8.5	7.0	8.5	8.5	5.5	3.0	8.5	8.0
2	16.5	14.5	10.0	9.0	8.5	8.5	8.5	8.0	6.5	5.5	9.5	8.5
3	17.0	14.5	10.5	10.0	9.5	8.5	8.0	7.5	7.0	6.5	9.5	8.5
4	17.5	15.5	10.5	10.0	10.0	9.0	8.0	7.5	7.0	7.0	9.0	8.5
5	17.5	15.5	10.0	10.0	9.0	8.0	8.0	6.5	7.5	7.0	9.5	9.0
6	17.0	16.0	10.0	9.5	8.5	8.0	6.5	5.5	8.0	7.5	9.0	8.0
7	16.0	15.5	10.0	9.0	8.5	8.0	5.5	5.0	7.5	6.5	9.0	8.0
8	15.5	15.0	9.5	8.5	8.0	8.0	7.0	5.5	6.5	6.0	9.0	8.0
9	15.5	14.0	9.0	8.5	9.0	8.0	7.0	6.5	6.5	6.0	8.5	7.5
10	15.5	13.5	8.5	8.0	9.0	7.0	6.5	6.0	7.5	6.5	8.5	8.0
11	15.5	14.5	8.5	7.5	7.0	6.0	7.5	6.0	6.5	5.5	8.0	7.5
12	15.0	14.5	7.5	6.5	8.0	6.5	8.0	7.5	6.0	5.0	7.5	5.5
13	15.0	14.0	6.5	6.0	8.5	8.0	8.0	7.5	6.0	5.0	7.0	6.0
14	14.5	14.5	6.5	6.0	8.5	8.5	8.0	8.0	6.0	6.0	7.0	6.0
15	15.0	14.0	6.5	5.5	9.0	8.5	8.0	7.5	6.0	5.5	6.5	5.5
16	14.5	14.0	8.5	6.5	8.5	7.5	8.5	8.0	6.5	6.0	7.5	6.0
17	14.0	12.5	9.0	8.5	9.0	8.0	8.0	7.0	7.0	6.5	7.5	7.0
18	13.0	12.0	9.0	7.5	9.0	9.0	7.0	5.5	8.0	7.0	8.0	6.5
19	12.0	10.5	7.5	6.5	9.5	9.0	5.5	5.0	8.0	7.5	8.0	7.0
20	10.5	10.0	6.5	6.0	9.0	9.0	6.0	5.0	8.0	7.5	8.0	7.5
21	10.0	9.5	6.0	5.5	9.0	8.0	6.0	5.5	7.5	6.5	7.5	6.5
22	10.5	10.0	7.5	6.0	8.0	7.5	6.0	5.5	7.5	6.5	8.0	7.0
23	11.5	11.0	7.5	7.5	7.5	7.5	6.0	5.5	8.0	7.5	8.0	7.5
24	11.5	11.5	8.0	7.5	8.0	7.5	6.0	6.0	8.5	8.0	8.5	7.0
25	11.5	11.5	8.0	7.0	8.0	7.5	6.0	5.5	8.5	8.5	8.5	7.0
26	11.5	11.0	7.0	6.5	8.0	8.0	6.0	4.0	9.5	8.5	8.5	8.0
27	11.0	11.0	7.0	6.5	7.5	6.5	4.0	1.5	9.5	9.5	8.0	7.0
28	11.0	10.0	7.0	6.5	8.0	6.5	1.5	.0	9.5	9.0	7.5	7.0
29	10.0	9.5	7.5	7.0	7.5	7.0	.5	.0	9.0	8.0	8.5	7.5
30	10.0	10.0	7.5	7.5	7.5	7.5	1.0	.0	---	---	8.5	7.0
31	10.0	9.5	---	---	8.5	7.5	3.0	1.0	---	---	8.0	7.5
MONTH	17.5	9.5	10.5	5.5	10.0	6.0	8.5	.0	9.5	3.0	9.5	5.5

14305500 SILETZ RIVER AT SILETZ, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.5	7.0	13.5	11.0	14.5	13.0	19.0	16.5	21.0	17.5	16.0	14.5
2	9.0	7.0	14.0	12.5	13.5	11.5	18.0	16.5	20.5	19.5	18.5	15.5
3	8.5	7.5	14.0	11.0	13.0	11.0	16.5	14.5	21.0	18.0	18.5	15.0
4	8.5	7.5	13.0	12.0	14.0	10.5	14.5	13.5	21.0	17.5	18.5	15.5
5	8.5	8.0	12.5	10.5	13.0	12.0	15.0	13.0	19.5	17.5	18.5	16.0
6	8.0	6.5	13.5	11.5	12.0	11.5	17.5	13.5	20.0	16.0	17.5	17.0
7	7.0	5.5	14.0	11.0	12.5	11.5	19.5	15.5	20.5	17.0	19.0	16.5
8	8.0	7.0	12.5	11.5	14.0	12.0	18.5	17.0	20.5	18.0	19.0	16.0
9	8.0	7.5	11.5	11.0	15.0	13.0	17.0	16.5	22.0	18.5	19.0	16.0
10	9.0	7.0	11.0	10.0	14.0	13.5	19.0	15.5	21.0	18.5	18.0	16.5
11	9.5	7.0	10.5	10.5	13.5	12.5	18.0	16.5	20.0	18.0	19.0	16.0
12	11.0	8.0	11.0	10.5	13.5	12.0	19.5	16.0	20.0	17.5	17.5	16.0
13	11.0	9.0	13.0	11.0	13.0	12.0	19.5	16.5	20.0	17.5	16.0	15.0
14	11.0	9.0	13.0	11.5	12.0	11.0	19.5	17.5	20.5	17.0	17.0	14.5
15	10.0	8.5	13.5	11.0	15.0	11.5	21.5	17.5	19.5	17.0	18.0	14.5
16	10.5	8.5	14.5	10.5	14.5	14.0	21.0	18.5	20.5	18.0	18.5	15.0
17	10.5	10.0	15.5	11.5	17.0	13.5	21.0	18.0	19.5	18.0	18.0	16.0
18	10.5	9.5	16.0	13.5	18.5	14.5	21.5	18.5	19.0	17.5	16.5	15.5
19	10.5	10.5	16.0	13.5	19.0	15.0	21.5	18.5	20.0	16.5	15.5	15.0
20	10.0	9.5	16.0	13.5	17.5	16.0	23.0	19.0	20.0	16.5	15.0	14.0
21	10.0	9.0	15.0	13.5	16.0	14.5	23.5	20.0	19.0	16.5	15.5	13.5
22	10.0	9.0	14.0	12.5	16.0	13.5	22.5	20.0	19.0	16.0	15.5	13.0
23	10.5	9.0	13.5	11.0	16.0	14.0	22.0	18.5	20.0	16.0	16.0	13.5
24	11.0	10.0	12.0	10.5	15.0	14.0	21.5	18.5	20.0	17.5	16.5	14.0
25	10.5	9.0	11.0	10.5	14.0	12.5	22.0	19.0	19.0	17.0	17.0	14.5
26	12.5	10.0	10.5	10.0	14.0	12.0	22.5	19.0	17.5	16.5	16.0	15.0
27	13.5	11.5	11.5	10.5	17.0	13.5	23.5	19.5	18.5	17.0	15.0	14.5
28	13.0	11.5	13.5	10.5	18.5	14.5	22.5	19.0	18.5	15.0	15.0	14.0
29	12.0	10.5	14.0	12.0	19.0	15.5	22.0	18.5	18.5	15.5	15.5	14.0
30	12.5	9.5	14.0	12.0	19.5	15.5	21.5	18.5	16.5	16.0	17.0	14.5
31	---	---	14.0	13.5	---	---	20.5	18.5	17.0	15.5	---	---
MONTH	13.5	5.5	16.0	10.0	19.5	10.5	23.5	13.0	22.0	15.0	19.0	13.0

14306030 YAQUINA RIVER NEAR CHITWOOD, OR

LOCATION.--Lat 44°39'29", long 123°50'15", in NE¼SW¼ sec.31, T.10 S., R.9 W., Lincoln County, Hydrologic Unit 17100204, on left bank 200 ft (60 m) below Thornton Creek and 1.1 mi (1.8 km) west of Chitwood.

DRAINAGE AREA.--71.0 mi^2 (183.9 km^2).

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder. Datum of gage is 28.43 ft (8.665 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those below 20 ft^3/s (0.57 m^3/s), which are fair. No regulation or diversion above station.

AVERAGE DISCHARGE.--8 years, 243 ft^3/s (6.88 m^3/s), 46.48 in/yr (1,181 mm/yr), 176,100 acre-ft/yr (217 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,150 ft^3/s (174 m^3/s) Nov. 16, 1973, gage height, 14.43 ft (4.398 m); minimum, 2.8 ft^3/s (0.079 m^3/s) Sept. 27, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,710 ft^3/s (76.7 m^3/s) Jan. 14, gage height, 9.28 ft (2.829 m), no peak above base of 3,000 ft^3/s (85.0 m^3/s); minimum, 6.6 ft^3/s (0.19 m^3/s) Oct. 10-12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.9	128	245	455	164	329	204	154	60	33	14	11
2	7.9	100	799	483	223	301	193	143	67	31	14	20
3	7.9	96	829	452	332	274	178	136	65	34	14	19
4	7.9	100	1090	431	312	253	175	131	63	43	13	14
5	7.2	143	1030	706	282	239	181	123	54	38	13	11
6	7.2	138	699	709	335	213	355	119	53	33	12	9.4
7	7.2	114	508	558	378	193	580	114	56	31	13	9.4
8	7.9	94	391	652	355	178	544	109	53	30	12	9.4
9	7.9	81	332	1710	315	164	487	114	48	30	12	9.4
10	7.2	71	312	1750	279	162	544	109	46	30	12	8.7
11	7.2	63	271	1200	250	193	562	103	44	27	12	7.9
12	6.6	58	285	1880	223	232	483	100	43	26	13	9.4
13	7.9	53	285	2450	201	566	397	98	61	26	13	10
14	9.4	49	279	2460	187	938	346	94	98	25	13	12
15	12	48	269	1890	175	900	324	89	69	23	12	11
16	13	46	253	1160	159	792	288	85	60	23	11	11
17	11	67	263	840	154	691	261	83	54	22	11	8.7
18	25	123	418	656	332	675	242	81	49	21	12	7.9
19	109	213	652	529	476	610	239	79	46	21	12	10
20	164	175	766	435	424	547	266	77	44	20	12	23
21	107	143	1250	365	374	494	290	77	43	20	10	26
22	54	173	1300	318	341	448	301	83	41	19	9.4	18
23	46	349	907	285	324	397	288	83	40	19	8.7	13
24	43	599	720	255	312	346	274	77	44	18	9.4	11
25	100	774	595	229	304	310	245	77	53	18	8.7	10
26	87	810	497	210	312	298	223	75	43	17	8.7	8.7
27	112	644	418	184	329	277	204	79	38	17	10	8.7
28	114	462	355	164	346	250	187	71	37	16	10	9.4
29	100	346	312	143	346	235	173	65	35	15	9.4	10
30	105	279	282	138	---	223	162	61	34	14	9.4	10
31	167	---	290	133	---	207	---	58	---	14	11	---
TOTAL	1476.3	6539	16902	23830	8544	11935	9196	2947	1541	754	354.7	357.0
MEAN	47.6	218	545	769	295	385	307	95.1	51.4	24.3	11.4	11.9
MAX	167	810	1300	2460	476	938	580	154	98	43	14	26
MIN	6.6	46	245	133	154	162	162	58	34	14	8.7	7.9
CFSM	.67	3.07	7.68	10.8	4.16	5.42	4.32	1.34	.72	.34	.16	.17
IN.	.77	3.43	8.86	12.49	4.48	6.25	4.82	1.54	.81	.40	.19	.19
AC-FT	2930	12970	33530	47270	16950	23670	18240	5850	3060	1500	704	708

CAL YR 1979 TOTAL 81337.2 MEAN 223 MAX 2670 MIN 5.9 CFSM 3.14 IN 42.62 AC-FT 161300
WTR YR 1980 TOTAL 84376.0 MEAN 231 MAX 2460 MIN 6.6 CFSM 3.25 IN 44.21 AC-FT 167400

14306100 NORTH FORK ALSEA RIVER AT ALSEA, OR

LOCATION.--Lat 44°22'45", long 123°35'40", in SE¼ sec.1, T.14 S., R.8 W., Benton County, Hydrologic Unit 17100205, on left bank at Alsea, 0.2 mi (0.3 km) upstream from bridge on Lobster Valley Road, 0.7 mi (1.1 km) upstream from confluence with South Fork, and at mile 49.4 (79.5 km).

DRAINAGE AREA.--63.0 mi² (163 km²).

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 272.31 ft (83.000 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for period of no gage-height record May 1 to July 10, which are fair. No regulation. Some diversions by pumping above station.

AVERAGE DISCHARGE.--23 years, 279 ft³/s (7.901 m³/s), 60.14 in/yr (1,528 mm/yr), 202,100 acre-ft/yr (249 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,100 ft³/s (399 m³/s) Dec. 22, 1964, gage height, 14.57 ft (4.441 m), from rating curve extended above 2,900 ft³/s (82.1 m³/s) on basis of slope-area measurement at gage height 11.80 ft (3.597 m); minimum, 8.3 ft³/s (0.24 m³/s) June 8, Sept. 19, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,000 ft³/s (56.6 m³/s) and maximum discharge, 5,350 ft³/s (152 m³/s) Jan. 12, gage height, 9.25 ft (2.819 m); minimum, 17 ft³/s (0.48 m³/s) Sept. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	184	224	512	271	404	200	180	70	47	25	23
2	20	158	984	421	367	359	186	170	70	47	25	24
3	21	178	774	391	465	328	178	160	76	47	25	24
4	20	197	1060	379	375	306	186	155	77	54	24	22
5	22	288	799	709	332	303	239	150	73	51	24	22
6	21	245	537	562	484	282	542	140	70	47	23	22
7	22	195	404	438	479	265	547	140	72	45	23	23
8	22	163	324	498	412	245	522	130	70	42	23	22
9	21	139	285	998	359	230	603	130	68	39	23	22
10	20	123	268	942	321	224	567	130	64	41	22	21
11	20	111	227	793	288	255	488	125	62	38	22	21
12	21	100	245	4140	265	321	412	120	60	38	22	23
13	21	92	242	3320	245	658	355	115	66	36	22	25
14	22	86	236	2440	233	936	347	110	98	36	22	25
15	23	82	239	1610	218	750	336	105	90	36	22	23
16	22	86	224	1090	206	593	292	103	80	33	23	22
17	22	90	233	837	215	557	275	98	70	32	23	19
18	35	156	387	674	347	619	252	95	64	32	23	19
19	117	197	479	567	447	542	252	92	60	30	23	22
20	285	156	547	484	391	512	324	90	58	28	22	32
21	153	132	998	425	339	461	507	88	56	28	21	26
22	128	209	895	379	339	412	447	88	54	27	21	23
23	278	336	793	343	383	367	371	90	54	27	21	20
24	178	652	849	310	371	328	328	95	56	28	21	19
25	470	537	641	288	363	303	285	93	60	26	21	19
26	517	479	488	268	447	288	258	94	65	26	21	18
27	363	421	395	242	456	268	236	99	60	25	21	18
28	265	339	336	227	474	242	215	92	54	25	22	19
29	197	278	292	215	452	227	200	87	52	24	21	19
30	195	245	265	203	---	218	189	80	48	24	21	19
31	236	---	313	197	---	212	---	74	---	24	23	---
TOTAL	3777	6654	14983	24902	10344	12015	10139	3518	1977	1083	695	656
MEAN	122	222	483	803	357	388	338	113	65.9	34.9	22.4	21.9
MAX	517	652	1060	4140	484	936	603	180	98	54	25	32
MIN	20	82	224	197	206	212	178	74	48	24	21	18
CFSM	1.94	3.52	7.67	12.7	5.67	6.16	5.37	1.79	1.05	.55	.36	.35
IN.	2.23	3.93	8.85	14.70	6.11	7.09	5.99	2.08	1.17	.64	.41	.39
AC-FT	7490	13200	29720	49390	20520	23830	20110	6980	3920	2150	1380	1300

CAL YR 1979 TOTAL 79242 MEAN 217 MAX 2580 MIN 20 CFSM 3.44 IN 46.79 AC-FT 157200
WTR YR 1980 TOTAL 90743 MEAN 248 MAX 4140 MIN 18 CFSM 3.94 IN 53.58 AC-FT 180000

14306400 FIVE RIVERS NEAR FISHER, OR

LOCATION.--Lat 44°20'15", long 123°49'35", W½ sec.19, T.14 S., R.9 W., Lincoln County, Hydrologic Unit 17100205, in Siuslaw National Forest, on left bank at downstream side of abandoned highway bridge, 500 ft (152 m) downstream from Lobster Creek, 3.2 mi (5.1 km) north of Fisher, and at mile 3.3 (5.3 km).

DRAINAGE AREA.--114 mi^2 (295 km^2).

PERIOD OF RECORD.--August 1958 to September 1963, October 1967 to current year.

REVISED RECORDS.--WSP 1718: 1959.

GAGE.--Water-stage recorder. Altitude of gage is 130 ft (39.6 m) from topographic map.

REMARKS.--Records excellent. No regulation or diversion above station.

AVERAGE DISCHARGE.--18 years, 551 ft^3/s (15.60 m^3/s), 65.64 in/yr (1,667 mm/yr), 399,200 acre-ft/yr (492 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,200 ft^3/s (487 m^3/s) Jan. 21, 1972, gage height, 21.08 ft (6.425 m); minimum, 16 ft^3/s (0.45 m^3/s) Oct. 1, 1967.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 22, 1964, reached a stage of 22.3 ft (6.80 m), from floodmarks, discharge, 19,000 ft^3/s (538 m^3/s) from rating curve extended above 10,000 ft^3/s (283 m^3/s).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 4,000 ft^3/s (113 m^3/s) and maximum discharge, 7,000 ft^3/s (198 m^3/s) Jan. 12, gage height, 13.47 ft (4.106 m); minimum, 25 ft^3/s (0.71 m^3/s) Sept. 11, 12, 17, 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	385	504	1100	549	818	365	308	121	79	41	32
2	39	345	2400	898	858	712	343	288	146	75	41	37
3	39	468	1870	789	1070	639	325	273	150	75	41	34
4	38	525	2730	758	782	597	335	259	136	87	39	30
5	37	761	2090	1270	656	558	429	245	123	82	38	32
6	36	621	1400	1090	874	510	1220	236	119	75	38	28
7	36	468	1050	886	846	468	1090	222	125	71	37	29
8	37	380	834	898	723	432	894	216	116	69	37	28
9	37	318	719	1450	628	400	1090	240	110	71	37	27
10	36	275	649	1710	561	388	1070	214	106	69	36	26
11	35	242	558	1630	507	432	902	201	104	65	34	26
12	34	218	558	5490	462	561	758	195	101	65	36	26
13	34	199	528	5850	426	1420	653	184	136	63	36	28
14	35	184	495	4740	400	1870	660	176	159	62	36	29
15	36	173	465	3140	378	1430	625	171	129	60	34	28
16	37	180	429	2140	353	1130	555	163	116	59	34	27
17	37	197	504	1650	375	1050	507	155	110	57	33	25
18	48	393	894	1300	726	1100	465	152	101	56	34	25
19	245	663	1120	1070	886	974	477	146	96	54	36	29
20	579	447	1240	906	740	906	576	140	92	54	33	50
21	340	358	2100	775	625	814	807	138	91	53	32	44
22	259	604	1910	677	642	726	726	148	89	50	30	34
23	395	950	1690	600	830	653	600	155	92	51	30	29
24	310	1550	2000	543	779	588	549	150	101	50	30	28
25	1010	1310	1580	495	740	537	480	161	112	48	29	27
26	796	1210	1210	453	946	522	435	159	112	47	29	27
27	621	1070	998	413	1020	486	400	157	96	45	30	26
28	477	830	830	380	1040	438	373	140	87	44	32	28
29	378	674	716	355	954	410	350	131	86	42	29	29
30	365	564	656	335	---	393	328	123	79	41	28	29
31	456	---	810	330	---	383	---	119	---	41	30	---
TOTAL	6902	16562	35537	44121	20376	22345	18387	5765	3341	1860	1060	897
MEAN	223	552	1146	1423	703	721	613	186	111	60.0	34.2	29.9
MAX	1010	1550	2730	5850	1070	1870	1220	308	159	87	41	50
MIN	34	173	429	330	353	383	325	119	79	41	28	25
CFSM	1.96	4.84	10.1	12.5	6.17	6.33	5.38	1.63	.97	.53	.30	.26
IN.	2.25	5.40	11.60	14.40	6.65	7.29	6.00	1.88	1.09	.61	.35	.29
AC-FT	13690	32850	70490	87510	40420	44320	36470	11430	6630	3690	2100	1780

CAL YR 1979 TOTAL 170496 MEAN 467 MAX 3690 MIN 27 CFSM 4.10 IN 55.64 AC-FT 338200
WTR YR 1980 TOTAL 177153 MEAN 484 MAX 5850 MIN 25 CFSM 4.25 IN 57.81 AC-FT 351400

14306500 ALSEA RIVER NEAR TIDEWATER, OR

LOCATION.--Lat 44°23'10", long 123°49'50", in NW¼NW¼ sec.6, T.14 S., R.9 W., Lincoln County, Hydrologic Unit 17100205, on right bank 0.9 mi (1.4 km) downstream from Grass Creek, 2.5 mi (4.0 km) upstream from Scott Creek, 3.8 mi (6.1 km) southeast of Tidewater, and at mile 21.0 (33.8 km).

DRAINAGE AREA.--334 mi² (865 km²).

PERIOD OF RECORD.--October 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 48.16 ft (14.679 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 16, 1939, nonrecording gage at present site and datum.

REMARKS.--Records excellent. No regulation. Diversion for irrigation above station.

AVERAGE DISCHARGE.--41 years, 1,517 ft³/s (42.96 m³/s), 61.68 in/yr (1,567 mm/yr), 1,099,000 acre-ft/yr (1.36 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 41,800 ft³/s (1,180 m³/s) Dec. 22, 1964, gage height, 27.44 ft (8.364 m); minimum, 45 ft³/s (1.27 m³/s) Sept. 26, 27, 1965.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood on or about Feb. 3, 1890, reached a stage of 29.5 ft (8.99 m), from floodmark (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 13,000 ft³/s (368 m³/s) and maximum discharge, 19,600 ft³/s (555 m³/s) Jan. 12, gage height, 18.18 ft (5.541 m); minimum, 76 ft³/s (2.15 m³/s) Sept. 11-13, 17-19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89	1020	1290	3120	1270	2200	1090	940	387	238	100	88
2	88	874	5140	2590	1900	1920	1020	884	426	230	100	99
3	86	1050	4990	2330	2600	1720	970	845	464	228	100	102
4	85	1150	6100	2110	2010	1620	970	806	430	255	105	95
5	85	1730	5490	3720	1680	1540	1070	768	397	255	105	89
6	85	1500	3610	3380	2160	1430	2890	740	376	236	110	86
7	86	1160	2700	2670	2340	1330	3290	712	387	220	107	85
8	88	950	2150	2670	2000	1240	2690	685	376	210	105	86
9	88	806	1820	4420	1730	1150	3010	708	353	207	102	83
10	85	703	1710	5450	1550	1090	3060	681	339	207	100	80
11	82	633	1480	4400	1400	1200	2650	641	330	200	97	78
12	80	580	1480	14600	1290	1350	2230	620	317	192	97	76
13	83	528	1460	16400	1200	3370	1870	597	366	190	97	79
14	83	492	1380	13200	1130	5000	1870	575	524	183	97	86
15	88	460	1330	9270	1070	4300	1780	554	430	180	97	88
16	89	468	1260	6430	1000	3360	1600	537	376	176	95	83
17	88	508	1280	4980	1010	2930	1470	512	353	171	95	79
18	107	865	2170	3930	1710	3260	1350	500	327	164	95	76
19	533	1520	2710	3190	2350	2870	1320	488	311	158	95	79
20	1210	1120	3110	2680	2020	2620	1540	476	293	154	97	122
21	1100	899	5530	2290	1710	2420	2250	464	287	145	92	143
22	624	1210	5530	1990	1640	2140	2230	472	281	137	89	119
23	1110	2250	4600	1770	2040	1920	1830	512	281	128	86	103
24	850	3640	5560	1590	2010	1720	1640	492	296	119	86	97
25	2210	3340	4380	1460	1860	1570	1440	500	349	115	83	92
26	2130	3000	3320	1350	2300	1490	1320	504	346	115	82	89
27	1700	2660	2680	1240	2510	1430	1210	524	302	115	83	85
28	1300	2100	2250	1140	2610	1290	1130	472	275	110	85	85
29	1020	1710	1950	1060	2500	1210	1060	433	261	110	86	88
30	929	1460	1770	1010	---	1160	991	415	247	105	83	91
31	1180	---	2050	976	---	1100	---	394	---	105	83	---
TOTAL	17461	40386	92280	127416	52600	62950	52841	18451	10487	5358	2934	2731
MEAN	563	1346	2977	4110	1814	2031	1761	595	350	173	94.6	91.0
MAX	2210	3640	6100	16400	2610	5000	3290	940	524	255	110	143
MIN	80	460	1260	976	1000	1090	970	394	247	105	82	76
CFSM	1.69	4.03	8.91	12.3	5.43	6.08	5.27	1.78	1.05	.52	.28	.27
IN.	1.94	4.50	10.28	14.19	5.86	7.01	5.89	2.06	1.17	.60	.33	.30
AC-FT	34630	80110	183000	252700	104300	124900	104800	36600	20800	10630	5820	5420

CAL YR 1979 TOTAL 453350 MEAN 1242 MAX 10400 MIN 80 CFSM 3.72 IN 50.49 AC-FT 899200
WTR YR 1980 TOTAL 485895 MEAN 1328 MAX 16400 MIN 76 CFSM 3.98 IN 54.12 AC-FT 963800

14306500 ALSEA RIVER NEAR TIDEWATER, OR--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1979 to September 1980.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1979 to September 1980.
WATER TEMPERATURES: October 1979 to September 1980.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 81 micromhos Aug. 18; minimum recorded, 48 micromhos Mar. 2.
WATER TEMPERATURES: Maximum, 24.0°C July 20; minimum recorded, 6.0°C Dec. 11, 12.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	PH FIELD (UNITS)	OXYGEN, DIS-SOLVED (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	SILICA, DIS-SOLVED (MG/L AS SIO2)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT												
18...	0830	92	13.5	7.4	10.4	80	25	--	14	6.2	2.5	6.0
NOV												
06...	1300	1490	11.0	6.3	10.7	58	--	32	12	4.1	1.4	4.6
DEC												
11...	1600	1450	6.8	7.2	12.6	57	80	K9	14	4.0	1.1	4.3
JAN												
22...	1430	1960	6.8	7.1	11.8	53	K13	--	14	3.8	1.0	4.2
FEB												
06...	0900	2010	8.6	7.2	11.5	53	K7	K3	13	3.7	1.2	4.3
APR												
16...	0900	1620	10.2	6.2	10.8	56	27	K6	12	3.4	1.1	4.6
MAY												
21...	1100	460	14.8	7.2	10.2	63	47	K6	14	4.6	1.8	4.5
JUN												
04...	1000	430	12.1	7.3	12.6	60	K21	K12	13	4.3	1.5	4.6
JUL												
08...	1630	212	18.4	7.5	9.7	66	22	4	13	4.6	1.7	5.0
AUG												
06...	0900	108	17.5	7.6	8.8	70	28	1075	13	6.5	1.9	4.8
SEP												
17...	1630	78	17.3	6.4	9.8	75	K32	K13	14	6.5	2.1	5.5

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
OCT												
18...	1.1	30	7.0	4.8	.1	.58	.15	--	.060	.10	--	.020
NOV												
06...	.7	16	4.3	3.9	.0	.39	1.1	.33	.020	1.1	1.5	.010
DEC												
11...	.7	16	1.5	4.1	.1	.14	.75	.40	.010	.86	1.3	.010
JAN												
22...	.6	13	.4	4.2	.0	.34	.70	.69	.010	.70	1.4	.000
FEB												
06...	.6	15	1.5	4.2	.0	.07	.65	.34	.000	.65	.99	.020
APR												
16...	.7	17	3.0	4.2	.1	.41	.54	.37	.000	.51	.88	.030
MAY												
21...	.7	16	4.7	3.8	.0	.67	.23	--	.070	.24	--	.010
JUN												
04...	.7	16	.4	3.9	.1	.40	.23	.45	.070	.21	.73	.020
JUL												
08...	.7	21	.6	3.9	.2	.59	.15	.35	.060	.20	.61	.030
AUG												
06...	.9	31	1.4	4.6	.1	.35	.07	.18	.150	.14	.47	.020
SEP												
17...	.8	27	8.2	4.5	.1	.40	.00	.46	.020	.06	.54	.030

14306500 ALSEA RIVER NEAR TIDEWATER, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)	CARBON, ORGANIC TOTAL (MG/L AS C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	TUR-BID-ITY (NTU)	SED-IMENT, SUS-PENDED (MG/L)	SED-IMENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT												
18...	.030	2.3	.2	--	26	0	55	61	1.3	2	.50	81
NOV												
06...	.030	--	--	1.7	16	0	49	45	1.5	5	20	86
DEC												
11...	.020	--	--	2.6	15	0	50	43	2.0	6	23	70
JAN												
22...	.010	.9	.5	--	14	1	51	95	3.0	10	53	66
FEB												
06...	.040	--	--	2.3	14	0	38	40	3.4	14	76	61
APR												
16...	.040	1.1	.4	--	13	0	34	42	2.7	8	35	65
MAY												
21...	.020	--	--	1.8	19	3	46	45	1.2	6	7.5	58
JUN												
04...	.070	--	--	2.6	17	1	44	39	9.0	4	4.6	59
JUL												
08...	.020	2.0	.1	--	19	0	59	43	.60	1	.57	60
AUG												
06...	.030	--	--	1.5	24	0	48	52	1.0	3	.87	64
SEP												
17...	.090	--	--	2.3	25	0	57	58	1.0	2	.42	64

DATE	IRON, DIS-SOLVED (UG/L AS FE)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	ARSENIC DIS-SOLVED (UG/L AS AS)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)
OCT										
18...	120	210	10	20	0	0	0	--	3	1
JAN										
22...	30	350	5	10	1	1	10	100	<1	1
APR										
16...	40	430	4	20	0	1	10	200	--	--
JUL										
08...	100	160	6	10	2	2	20	0	<1	0

DATE	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	SILVER, DIS-SOLVED (UG/L AS AG)
OCT									
18...	0	--	<10	0	2	21	0	4	0
JAN									
22...	0	0	<3	0	0	16	0	4	0
APR									
16...	0	0	<3	0	0	1	--	--	0
JUL									
08...	0	10	<3	0	2	19	4	8	0

DATE	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SELE-NIUM, TOTAL (UG/L AS SE)	MERCURY DIS-SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, DIS-SOLVED (UG/L AS NI)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)
OCT									
18...	0	10	10	0	0	--	--	0	7
JAN									
22...	0	9	40	0	0	.0	.8	1	5
APR									
16...	0	<3	30	0	0	.0	.0	2	6
JUL									
08...	0	4	10	0	0	.0	--	3	2

14306500 ALSEA RIVER NEAR TIDEWATER, OR--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO AUGUST 1980

DATE	NOV 6,79		APR 16,80		MAY 21,80		JUL 9,80		AUG 6,80	
TIME	1300		0900		1100		1630		0900	
TOTAL CELLS/ML	86		120		760		300		930	
DIVERSITY: DIVISION	0.9		0.0		0.7		1.4		0.9	
.CLASS	0.9		0.0		0.7		1.4		0.9	
..ORDER	0.9		0.0		1.5		1.5		1.8	
...FAMILY	0.9		1.4		2.8		1.6		1.8	
....GENUS	0.9		1.4		3.0		2.1		1.8	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...OOCYSTACEAE										
....OOCYSTIS	--	-	--	-	--	-	--	-	13	1
...SCENEDESMACEAE										
....CRUCIGENIA	--	-	--	-	--	-	51#	17	100	11
....SCENEDESMUS	--	-	--	-	--	-	100#	35	--	-
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	--	-	--	-	14	2	--	-	13	1
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	--	-	--	-	220#	29	13	4	13	1
..PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	29#	33	--	-	27	4	--	-	--	-
....RHOICOSPHENIA	--	-	--	-	14	2	--	-	--	-
...CYMBELLACEAE										
....CYMBELLA	--	-	--	-	140#	18	--	-	--	-
...DIATOMACEAE										
....DIATOMA	--	-	--	-	14	2	--	-	--	-
...FRAGILARIACEAE										
....HANNAEA	--	-	39#	33	55	7	--	-	--	-
....SYNEDRA	--	-	--	-	69	9	13	4	--	-
...NAVICULACEAE										
....NAVICULA	--	-	64#	56	55	7	--	-	26	3
...NITZSCHIACEAE										
....NITZSCHIA	--	-	13	11	55	7	13	4	--	-
CRYPTOPHYTA (CRYPTOMONADS)										
.CRYPTOPHYCEAE										
..CRYPTOMONADALES										
...CRYPTOCHRYSIDACEAE										
....CHROOMONAS	--	-	--	-	--	-	--	-	13	1
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....ANACYSTIS	--	-	--	-	--	-	100#	35	490#	53
..HORMOGONALES										
...OSCILLATORIACEAE										
....LYNGBYA	--	-	--	-	96	13	--	-	--	-
....OSCILLATORIA	57#	67	--	-	--	-	--	-	260#	28

NOTE: # - DOMINANT ORGANISM: EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED: LESS THAN 1/2%

14306500 ALSEA RIVER NEAR TIDEWATER, OR--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	---	---	---	51	56	59	62	70	68	73
2		---	---	---	---	49	56	58	---	69	69	73
3		59	---	---	52	52	57	59	---	69	69	73
4		64	---	---	---	54	58	58	---	70	---	73
5		60	---	---	---	54	58	58	64	69	---	73
6		60	---	---	---	53	57	59	66	68	---	73
7		65	51	---	54	54	56	58	65	67	65	74
8		65	53	---	54	54	---	58	65	67	69	---
9		64	56	---	54	53	---	58	66	66	70	---
10		63	56	---	54	55	---	58	66	66	69	---
11		61	53	---	54	55	---	59	66	65	69	---
12		59	---	---	54	56	---	58	65	65	69	---
13		---	---	---	53	57	---	59	66	66	69	---
14		---	---	---	53	56	---	60	65	67	69	---
15		---	---	---	53	56	---	60	65	65	69	---
16		---	---	---	53	57	---	60	65	66	68	---
17		---	---	---	53	57	58	59	66	67	73	---
18		---	---	---	53	57	58	---	68	67	74	75
19		---	---	---	52	56	57	---	67	67	70	74
20		---	---	---	52	58	56	---	68	68	71	73
21		---	---	---	53	---	55	---	72	68	70	73
22		---	---	---	55	---	55	60	68	68	74	73
23		57	---	56	56	---	58	60	68	68	71	74
24		60	---	58	56	---	57	61	67	68	70	75
25		56	---	59	55	---	57	60	69	68	71	74
26		---	---	59	53	---	61	60	69	69	72	74
27		---	---	56	53	---	61	61	68	68	72	74
28		---	---	54	53	---	61	62	68	68	71	74
29		---	---	---	51	61	60	61	67	68	71	75
30		---	---	---	---	59	60	62	68	68	72	75
31		---	---	---	---	56	---	62	---	69	71	---
MEAN		61	54	57	53	55	58	60	67	68	70	74

14306500 ALSEA RIVER NEAR TIDEWATER, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	11.0	10.5	---	---	9.0	7.0	---	---	10.0	9.5
2	---	---	10.5	10.0	---	---	8.5	7.0	---	---	10.5	9.5
3	---	---	11.5	10.5	---	---	8.5	7.0	---	---	10.5	9.0
4	---	---	11.0	11.0	---	---	8.5	7.0	---	---	10.5	9.5
5	---	---	11.0	10.5	---	---	---	---	---	---	10.0	9.0
6	---	---	10.5	10.0	---	---	---	---	---	---	10.0	9.0
7	---	---	10.5	9.0	---	---	---	---	---	---	10.0	9.0
8	---	---	10.0	9.0	---	---	---	---	---	---	10.0	9.0
9	---	---	10.0	9.0	---	---	---	---	---	---	9.5	9.0
10	---	---	9.5	8.5	---	---	---	---	---	---	9.0	8.5
11	---	---	9.5	8.5	7.0	6.0	---	---	8.0	7.0	8.5	7.5
12	---	---	9.5	8.5	7.0	6.0	---	---	7.0	6.5	8.5	7.5
13	---	---	9.0	8.5	8.0	6.5	---	---	7.0	6.5	8.5	7.5
14	---	---	9.0	8.0	8.0	7.0	---	---	8.0	6.5	8.5	7.5
15	---	---	9.0	8.0	9.0	7.5	---	---	8.0	6.5	8.5	7.5
16	---	---	9.0	7.5	9.0	8.0	---	---	8.5	7.0	9.0	8.0
17	---	---	9.0	7.5	9.0	8.0	---	---	9.5	7.5	9.5	8.5
18	13.5	---	8.5	7.5	9.0	8.5	---	---	9.5	9.0	9.5	9.0
19	13.0	12.0	8.5	7.0	10.0	8.5	---	---	9.5	9.0	9.0	8.5
20	11.5	10.5	8.5	7.0	10.0	9.0	---	---	9.0	8.5	9.5	9.0
21	10.5	10.0	---	---	10.0	9.0	---	---	8.5	8.0	9.5	9.0
22	11.0	10.5	---	---	9.0	8.5	---	---	9.0	8.0	9.5	9.0
23	12.0	11.0	---	---	8.5	8.0	---	---	9.5	8.5	9.5	9.0
24	12.5	11.5	---	---	8.5	8.0	---	---	9.5	9.0	---	---
25	12.0	11.5	---	---	8.5	8.0	---	---	10.5	9.5	---	---
26	12.0	11.5	---	---	8.5	7.5	---	---	11.0	10.5	---	---
27	12.0	11.5	---	---	8.0	7.5	---	---	10.5	10.0	---	---
28	11.5	10.5	---	---	7.5	7.0	---	---	10.5	10.0	---	---
29	11.0	10.5	---	---	7.5	7.0	---	---	10.0	9.5	---	---
30	11.0	10.5	---	---	8.5	7.5	---	---	---	---	---	---
31	11.0	10.5	---	---	9.0	8.0	---	---	---	---	---	---
MONTH	13.5	10.0	11.5	7.0	10.0	6.0	9.0	7.0	11.0	6.5	10.5	7.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	14.0	11.5	13.0	12.0	19.5	18.5	21.5	20.5	---	---
2	---	---	13.5	12.0	13.5	12.0	18.5	16.5	21.5	19.5	---	---
3	---	---	13.0	12.0	14.0	12.0	16.5	15.5	21.5	19.0	---	---
4	---	---	13.0	11.5	14.0	12.5	16.0	15.0	20.0	18.5	---	---
5	---	---	14.0	12.0	13.5	13.0	17.5	15.0	19.0	18.0	---	---
6	---	---	13.5	11.5	13.0	12.5	19.5	16.5	18.5	18.0	---	---
7	---	---	12.5	11.5	13.5	12.5	19.0	18.0	20.0	18.0	---	---
8	---	---	12.0	10.5	14.0	13.0	18.0	17.5	21.0	19.0	---	---
9	---	---	11.0	10.0	14.5	13.5	19.0	16.5	21.5	19.5	---	---
10	---	---	11.5	10.5	15.0	14.0	19.5	18.0	21.0	19.5	---	---
11	---	---	12.5	11.0	14.5	13.5	19.5	18.5	20.0	18.5	---	---
12	---	---	12.5	11.0	14.5	13.5	20.0	18.0	21.5	18.5	---	---
13	---	---	14.0	12.0	14.5	12.5	20.5	19.0	20.0	18.0	---	---
14	---	---	16.0	14.0	15.0	12.5	21.5	19.0	19.5	18.0	---	---
15	---	---	16.0	14.0	15.0	13.5	22.0	20.0	20.0	18.5	---	---
16	11.5	---	16.0	14.0	17.0	14.0	21.5	20.0	---	---	---	---
17	10.5	10.0	15.5	14.0	18.0	15.5	22.0	20.5	---	---	17.5	---
18	10.5	10.0	15.5	14.0	18.0	16.5	22.0	20.5	---	---	17.0	16.5
19	10.5	10.0	15.5	14.0	18.0	17.0	23.0	20.5	---	---	16.5	16.0
20	10.5	10.0	15.0	13.5	17.0	16.0	24.0	22.0	---	---	16.0	15.0
21	10.0	9.5	15.0	13.5	16.0	15.0	23.5	22.5	---	---	16.0	15.0
22	10.5	9.5	14.5	13.5	16.0	15.0	23.0	21.5	---	---	15.5	14.5
23	10.5	9.5	14.0	12.5	16.0	15.0	22.5	21.0	---	---	16.0	15.0
24	11.0	10.5	13.0	11.5	15.0	14.0	22.5	21.0	---	---	16.5	15.5
25	11.5	10.5	11.5	11.0	14.5	13.5	23.0	21.0	---	---	16.5	15.5
26	12.5	10.5	12.0	11.5	17.0	14.0	23.5	21.5	---	---	15.5	15.0
27	13.5	12.0	13.5	11.5	18.5	16.0	23.5	21.5	---	---	15.5	15.0
28	13.5	13.0	15.0	13.0	19.0	17.0	23.0	21.0	---	---	16.5	15.5
29	13.0	11.5	16.0	14.0	19.5	17.0	23.0	21.0	---	---	17.5	16.0
30	13.0	11.5	16.0	15.0	20.5	18.0	22.5	20.0	---	---	17.5	16.0
31	---	---	15.0	13.0	---	---	22.0	20.0	---	---	---	---
MONTH	13.5	9.5	16.0	10.0	20.5	12.0	24.0	15.0	21.5	18.0	17.5	14.5

14306900 BIG CREEK NEAR ROOSEVELT BEACH, OR

LOCATION.--Lat 44°10'05", long 124°03'55", in SE¼SE¼ sec.13, T.16 S., R.12 W., Lane County, Hydrologic Unit 17100205, on right bank 1.0 mi (1.6 km) downstream from Frying Pan Creek, 2.5 mi (4.0 km) east of Roosevelt Beach.

DRAINAGE AREA.--11.9 mi² (30.8 km²).

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 141 ft (43.0 m), by barometer.

REMARKS.--Records good except those for period of no gage-height record Oct. 22 to Nov. 22, which are fair. No regulation or diversion above station.

AVERAGE DISCHARGE.--8 years, 91.5 ft³/s (2.591 m³/s), 104.42 in/yr (2,652 mm/yr), 66,290 acre-ft/yr (81.7 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,150 ft³/s (60.9 m³/s) Nov. 30, 1975, gage height, 6.90 ft (2.103 m); minimum, 3.8 ft³/s (0.11 m³/s) Oct. 15, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 647 ft³/s (18.3 m³/s) Dec. 4, gage height, 5.68 ft (1.731 m), no peak above base of 800 ft³/s (22.7 m³/s); minimum, 3.8 ft³/s (0.11 m³/s) Oct. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	85	117	94	96	123	58	59	34	19	11	8.1
2	5.8	75	313	88	154	107	55	55	37	19	11	15
3	5.8	70	267	84	172	96	52	52	34	23	11	8.9
4	5.8	90	490	90	134	88	55	50	31	28	10	8.1
5	5.8	150	326	143	121	81	76	48	30	21	10	7.4
6	5.8	120	229	121	125	73	158	46	30	19	10	7.4
7	5.8	85	172	113	113	67	125	44	32	19	9.9	8.9
8	5.8	70	140	143	105	62	134	43	29	18	9.9	7.7
9	5.8	60	134	190	98	58	165	53	29	18	9.9	7.4
10	5.3	55	107	195	91	61	158	43	28	18	9.6	7.0
11	5.3	50	90	187	84	65	138	41	27	17	9.6	7.0
12	5.3	46	93	242	77	117	121	40	27	17	9.6	6.6
13	5.3	42	83	372	72	177	105	38	36	17	9.2	7.0
14	5.3	38	77	454	68	201	111	36	33	16	9.2	7.0
15	5.8	36	73	381	64	182	91	34	29	16	8.9	7.0
16	5.8	38	67	338	59	152	83	34	27	15	8.9	6.6
17	5.8	50	121	267	67	158	76	33	27	15	8.9	6.2
18	23	85	156	217	113	152	71	31	25	15	9.9	7.0
19	64	150	190	182	113	138	91	31	24	15	9.2	11
20	119	110	201	154	109	143	99	29	24	14	8.5	19
21	80	90	249	127	99	125	136	30	24	14	8.1	9.6
22	55	120	236	107	117	113	121	31	24	14	8.1	8.1
23	55	147	232	93	117	103	109	31	26	14	7.7	7.4
24	72	278	253	83	125	94	107	39	26	13	7.7	7.0
25	150	260	226	75	129	85	91	38	26	13	7.7	6.2
26	152	223	193	68	154	88	84	48	24	12	7.7	5.8
27	100	187	161	61	172	78	77	42	22	12	8.5	5.8
28	85	161	134	56	161	73	72	36	21	12	8.1	9.2
29	75	136	109	51	140	68	68	34	21	11	7.7	8.1
30	70	113	98	49	---	66	64	32	20	11	7.7	7.7
31	100	---	103	49	---	64	---	31	---	11	8.5	---
TOTAL	1296.5	3220	5440	4874	3249	3258	2951	1232	827	496	281.7	245.2
MEAN	41.8	107	175	157	112	105	98.4	39.7	27.6	16.0	9.09	8.17
MAX	152	278	490	454	172	201	165	59	37	28	11	19
MIN	5.3	36	67	49	59	58	52	29	20	11	7.7	5.8
CFSM	3.51	8.99	14.7	13.2	9.41	8.82	8.27	3.34	2.32	1.35	.76	.69
IN.	4.05	10.07	17.00	15.24	10.16	10.18	9.22	3.85	2.59	1.55	.88	.77
AC-FT	2570	6390	10790	9670	6440	6460	5850	2440	1640	984	559	486

CAL YR 1979 TOTAL 30509.5 MEAN 83.6 MAX 701 MIN 5.3 CFSM 7.03 IN 95.37 AC-FT 60520
WTR YR 1980 TOTAL 27370.4 MEAN 74.8 MAX 490 MIN 5.3 CFSM 6.29 IN 85.55 AC-FT 54290

14307580 LAKE CREEK NEAR DEADWOOD, OR

LOCATION.--Lat 44°04'58", long 123°47'05", in NW¼NW¼ sec.21, T.17 S., R.9 W., Lane County, Hydrologic Unit 17100206, on right bank 0.2 mi (0.3 km) upstream from Indian Creek, 1.5 mi (2.4 km) southwest of Deadwood, and at mile 2.6 (4.2 km).

DRAINAGE AREA.--174 mi² (451 km²).

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 178.86 ft (54.517 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow slightly regulated by natural storage in Triangle Lake. Several diversions for irrigation above station.

AVERAGE DISCHARGE.--13 years, 717 ft³/s (20.31 m³/s), 55.96 in/yr (1,421 mm/yr), 519,500 acre-ft/yr (641 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,700 ft³/s (558 m³/s) Jan. 21, 1972, gage height, 15.25 ft (4.648 m); minimum, 12 ft³/s (0.34 m³/s) Aug. 14, 15, 17, 18, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 4,200 ft³/s (119 m³/s) and maximum discharge, 5,490 ft³/s (155 m³/s) Jan. 13, gage height, 7.16 ft (2.182 m); minimum, 29 ft³/s (0.82 m³/s) Sept. 11, 12, 17-19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	520	580	1180	663	1090	486	413	176	91	43	38
2	42	403	2650	1130	1140	957	459	389	182	87	43	39
3	40	366	2640	1040	1500	852	438	370	189	87	43	40
4	40	481	3140	981	1150	779	438	352	179	113	42	37
5	39	965	2690	1960	949	723	543	339	169	100	40	35
6	39	764	1810	1680	1090	663	1770	331	163	93	39	34
7	40	561	1330	1310	1160	611	1890	318	179	87	39	33
8	40	433	1040	1350	1000	561	1490	302	169	81	39	34
9	40	352	875	2500	867	514	1580	327	160	81	38	33
10	38	302	800	2740	757	497	1610	310	154	79	38	31
11	38	264	689	2130	682	555	1390	298	148	75	37	30
12	38	238	643	3840	617	605	1150	287	142	75	37	30
13	38	214	598	5300	567	1290	965	275	166	71	37	32
14	39	200	561	5170	532	2680	897	264	189	69	37	34
15	40	189	532	4010	497	2110	852	254	172	67	37	33
16	40	203	497	3000	465	1640	743	246	160	66	37	31
17	40	218	514	2340	481	1350	669	226	154	64	35	30
18	69	481	800	1820	709	1230	611	222	136	60	37	29
19	302	927	981	1480	1150	1080	592	211	127	59	38	32
20	743	676	1120	1230	1040	1050	723	203	119	59	35	57
21	520	520	1990	1040	882	1040	1070	203	116	57	34	54
22	327	650	2170	912	897	942	1060	218	113	57	34	43
23	318	1090	1880	808	1340	852	889	242	111	57	33	39
24	291	2110	2060	723	1240	757	786	222	127	54	35	37
25	716	1750	1720	663	1090	696	682	222	142	52	34	35
26	730	1570	1350	611	1220	669	611	218	148	51	33	34
27	555	1360	1090	555	1260	643	555	226	130	49	34	33
28	459	1040	927	509	1300	586	503	214	116	48	34	34
29	394	822	815	470	1240	543	470	200	103	46	34	37
30	389	669	750	444	---	514	438	186	96	45	33	35
31	643	---	786	428	---	503	---	179	---	46	35	---
TOTAL	7129	20338	40028	53354	27485	28582	26360	8267	4435	2126	1144	1073
MEAN	230	678	1291	1721	948	922	879	267	148	68.6	36.9	35.8
MAX	743	2110	3140	5300	1500	2680	1890	413	189	113	43	57
MIN	38	189	497	428	465	497	438	179	96	45	33	29
CFSM	1.32	3.90	7.42	9.89	5.45	5.30	5.05	1.53	.85	.39	.21	.21
IN.	1.52	4.35	8.56	11.41	5.88	6.11	5.64	1.77	.95	.45	.24	.23
AC-FT	14140	40340	79400	105800	54520	56690	52290	16400	8800	4220	2270	2130

CAL YR 1979 TOTAL 213171 MEAN 584 MAX 4520 MIN 29 CFSM 3.36 IN 45.57 AC-FT 422800
WTR YR 1980 TOTAL 220321 MEAN 602 MAX 5300 MIN 29 CFSM 3.46 IN 47.10 AC-FT 437000

14307620 SIUSLAW RIVER NEAR MAPLETON, OR
(National stream-quality accounting network station)

LOCATION.--Lat 44°03'45", long 123°52'55", in SW¼NW¼ sec.27, T.17 S., R.10 W., Lane County, Hydrologic Unit 17100206, on right bank 250 ft (76 m) above Shoemaker Creek, 2.5 mi (4.0 km) northwest of Mapleton, and at mile 23.7 (38.1 km).

DRAINAGE AREA.--588 mi² (1,523 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 41 ft (12.5 m), from topographic map.

REMARKS.--Records good. No regulation or diversions above station.

AVERAGE DISCHARGE.--13 years, 2,130 ft³/s (60.32 m³/s), 49.19 in/yr (1,249 mm/yr), 1,543,000 acre-ft/yr (1.90 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 49,400 ft³/s (1,400 m³/s) Jan. 21, 1972, gage height, 28.45 ft (8.672 m); minimum, 45 ft³/s (1.27 m³/s) Aug. 18, 19, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of December 1964 reached a stage of about 28 ft (8.5 m), from information by local residents (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 15,000 ft³/s (425 m³/s) and maximum discharge, 16,900 ft³/s (479 m³/s) Jan. 13, gage height, 15.65 ft (4.770 m); minimum, 71 ft³/s (2.01 m³/s) Sept. 11, 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	148	1700	1780	3380	1860	2980	1580	1340	609	353	144	88
2	145	1350	6840	3510	2820	2670	1500	1280	620	340	138	95
3	145	1210	8870	3140	3760	2410	1430	1220	648	336	138	97
4	142	1330	8910	2870	2940	2230	1430	1160	620	401	138	92
5	139	2430	7360	5740	2470	2100	1650	1130	592	401	135	86
6	139	2220	5420	5560	2720	1950	4390	1090	576	375	130	81
7	139	1660	3810	4120	2840	1830	5040	1050	631	345	130	79
8	139	1320	2960	3810	2570	1740	3870	1010	620	324	127	77
9	142	1100	2510	6160	2310	1630	4000	1080	581	316	122	79
10	136	944	2340	7320	2090	1560	4200	1050	554	308	119	79
11	134	833	2040	5730	1910	1730	3820	997	533	280	117	73
12	134	753	1910	9770	1780	1900	3210	956	518	280	109	71
13	134	694	1790	16400	1670	3710	2720	922	570	276	112	73
14	134	643	1680	15700	1590	8330	2500	882	712	265	112	79
15	136	610	1590	12900	1510	7240	2400	849	648	258	109	83
16	142	643	1500	8990	1430	5710	2150	823	598	254	107	81
17	145	700	1520	6680	1450	4670	1960	786	560	239	102	79
18	212	1220	2190	5310	1970	4110	1810	761	518	236	102	79
19	1050	2490	2560	4310	3190	3540	1780	736	487	236	102	83
20	2070	2160	3060	3600	3010	3280	2000	712	468	218	102	146
21	1830	1590	5340	3100	2530	3130	2950	706	443	205	97	179
22	1130	1880	6570	2730	2490	2870	3440	755	429	198	92	144
23	1080	3490	5150	2450	3620	2590	2820	817	473	198	90	127
24	944	6490	5520	2230	3450	2360	2430	792	434	195	86	138
25	2040	5590	4680	2060	2990	2180	2110	773	498	185	83	114
26	2140	4640	3610	1910	3340	2110	1900	755	523	182	83	107
27	1750	3730	2950	1790	3450	2000	1750	761	473	173	83	102
28	1440	2790	2550	1660	3450	1840	1630	712	429	167	83	99
29	1210	2370	2280	1550	3290	1720	1510	677	392	158	83	104
30	1150	2040	2120	1450	---	1640	1420	642	370	152	83	107
31	1800	---	2230	1430	---	1610	---	614	---	146	83	---
TOTAL	22219	60620	113640	157360	74500	89370	75400	27838	16127	8000	3341	2921
MEAN	717	2021	3666	5076	2569	2883	2513	898	538	258	108	97.4
MAX	2140	6490	8910	16400	3760	8330	5040	1340	712	401	144	179
MIN	134	610	1500	1430	1430	1560	1420	614	370	146	83	71
CFSM	1.22	3.44	6.24	8.63	4.37	4.90	4.27	1.53	.92	.44	.18	.17
IN.	1.41	3.84	7.19	9.96	4.71	5.65	4.77	1.76	1.02	.51	.21	.18
AC-FT	44070	120200	225400	312100	147800	177300	149600	55220	31990	15870	6630	5790

CAL YR 1979 TOTAL 619272 MEAN 1697 MAX 12000 MIN 104 CFSM 2.89 IN 39.18 AC-FT 1228000
WTR YR 1980 TOTAL 651336 MEAN 1780 MAX 16400 MIN 71 CFSM 3.03 IN 41.21 AC-FT 1292000

14307620 SIUSLAW RIVER NEAR MAPLETON, OR--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: June 1978 to current year.
WATER TEMPERATURES: November 1967 to September 1975. October 1977 to current year.

INSTRUMENTATION.--Graphic temperature recorder since June 1967. Dual conductivity-temperature servo-programmer with digital recorder since June 1978.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 66 micromhos Oct. 19, 1978, June 18, 1980; minimum recorded, 34 micromhos Jan. 9, 1980.
WATER TEMPERATURES: Maximum, 31.0°C Aug. 10, 12, 1979; minimum, 0.0°C on several days in 1972, 1978, 1979.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 66 micromhos June 18; minimum recorded, 34 micromhos Jan. 9.
WATER TEMPERATURES: Maximum, 28.5°C July 27; minimum, 1.0°C Jan. 29-31.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	PH FIELD (UNITS)	OXYGEN, DIS-SOLVED (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	SILICA, DIS-SOLVED (MG/L AS SIO2)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT												
24...	1000	917	12.2	6.8	10.5	55	77	112	12	3.6	1.1	4.5
NOV												
15...	0945	460	5.2	6.8	12.7	42	K15	K10	11	3.7	1.0	4.3
DEC												
17...	1000	1470	7.8	6.3	11.7	46	K11	K7	11	2.7	1.0	3.3
JAN												
14...	1030	15200	9.0	7.2	11.2	40	--	52	11	2.3	.7	3.1
FEB												
19...	1330	3480	8.1	--	11.8	43	33	K15	11	3.2	1.0	3.6
APR												
21...	1430	3200	10.5	7.1	11.1	45	83	25	12	2.8	1.1	3.9
MAY												
12...	1000	1000	11.5	7.0	11.2	48	K15	K12	12	3.0	1.2	4.1
JUN												
23...	1100	405	16.0	7.5	10.2	51	K18	87	12	2.9	1.4	4.1
JUL												
21...	1130	241	24.0	7.5	8.6	52	29	K17	11	2.9	1.3	4.6
AUG												
11...	1100	119	20.7	7.3	8.6	54	K7	216	10	2.9	1.3	4.7
SEP												
15...	1130	80	16.2	7.5	9.9	58	23	23	9.9	3.3	1.2	4.8

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
OCT												
24...	.9	14	4.6	3.9	.0	.39	.85	.65	.010	.80	1.5	.000
NOV												
15...	.7	13	4.3	4.0	.0	.17	.58	.35	.010	.58	.94	.010
DEC												
17...	.6	4	2.2	3.6	.0	1.6	.50	3.2	.000	.46	3.7	.010
JAN												
14...	.7	7	.4	3.3	.1	.68	.12	.89	.010	.59	1.5	.000
FEB												
19...	.8	10	.8	3.9	.1	.28	.48	.58	.000	.48	1.1	.020
APR												
21...	.6	11	.4	3.2	.1	1.3	.33	2.5	.020	.31	2.8	.010
MAY												
12...	.8	12	.3	3.3	.1	.52	.19	.82	.010	.21	1.0	.010
JUN												
23...	.7	16	1.7	3.7	.1	.44	.07	.39	.060	.08	.53	.010
JUL												
21...	2.0	18	1.1	5.0	.1	.43	.00	.92	.040	.04	1.0	.030
AUG												
11...	.9	13	.1	5.1	.1	.86	.00	2.6	.030	.00	2.6	.030
SEP												
15...	1.4	18	.6	5.8	.1	.19	.00	.27	.010	.03	.31	.060

14307620 SIUSLAW RIVER NEAR MAPLETON, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)	CARBON, ORGANIC TOTAL (MG/L AS C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	TUR-BID-ITY (NTU)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT												
24...	--	3.6	.1	--	14	0	40	43	2.8	--	--	--
NOV												
15...	.010	--	--	2.0	13	0	41	39	1.1	1	1.2	79
DEC												
17...	.010	--	--	2.1	11	7	39	29	1.8	3	12	81
JAN												
14...	.030	2.9	--	--	9	2	33	26	16	60	2460	69
FEB												
19...	.030	--	--	2.2	12	2	20	33	5.5	15	141	63
APR												
21...	.030	2.3	.2	--	12	1	46	32	4.6	12	104	58
MAY												
12...	.020	--	--	3.2	12	0	32	33	2.6	2	5.4	45
JUN												
23...	.280	--	--	2.2	13	0	32	37	1.5	4	4.4	53
JUL												
21...	.020	2.7	.4	--	13	0	44	39	1.4	5	3.3	68
AUG												
11...	.040	--	--	3.1	13	0	44	33	1.6	5	1.6	65
SEP												
15...	.080	--	--	2.5	13	0	28	38	1.4	4	.86	83

DATE	IRON, DIS-SOLVED (UG/L AS FE)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	ARSENIC DIS-SOLVED (UG/L AS AS)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)
OCT									
24...	110	330	4	8	0	0	10	200	4
JAN									
14...	70	2400	7	60	0	1	20	100	<1
APR									
21...	60	520	4	20	0	0	20	100	1
JUL									
21...	100	270	7	20	1	1	20	0	1

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
OCT									
24...	0	0	0	<3	0	1	0	0	3
JAN									
14...	1	0	10	<3	3	0	7	2	6
APR									
21...	0	0	0	<3	0	3	5	0	3
JUL									
21...	0	0	10	<3	2	2	4	3	9

DATE	SILVER, DIS-SOLVED (UG/L AS AG)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SELE-NIUM, TOTAL (UG/L AS SE)	NICKEL, DIS-SOLVED (UG/L AS NI)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)
OCT								
24...	0	0	<10	0	0	0	0	3
JAN								
14...	0	0	7	20	0	0	2	7
APR								
21...	0	1	<3	20	0	0	3	2
JUL								
21...	0	0	<3	10	0	0	2	2

14307620 SIUSLAW RIVER NEAR MAPLETON, OR--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

DATE	FEB 19,80	APR 21,80	MAY 12,80	JUN 23,80
TIME	1330	1430	1000	1100
TOTAL CELLS/ML	320	100	230	190
DIVERSITY: DIVISION	0.3	0.0	0.0	1.6
.CLASS	0.3	0.0	0.0	1.6
..ORDER	0.5	0.0	0.0	1.9
...FAMILY	2.8	1.1	0.5	2.1
....GENUS	2.8	1.5	0.5	2.1

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...OOCYSTACEAE								
....ANKISTRODESMUS	--	-	--	-	--	-	--	-
....SELENASTRUM	--	-	--	-	--	-	--	-
...SCENEDESMACEAE								
....SCENEDESMUS	--	-	--	-	--	-	26	13
..TETRASPORALES								
...COCCOMYXACEAE								
....ELAKATOTHRIX	--	-	--	-	--	-	--	-
...PALMELLACEAE								
....SPHAEROCYSTIS	--	-	--	-	--	-	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CARTERIA	--	-	--	-	--	-	--	-
....CHLAMYDOMONAS	5	2	--	-	--	-	52#	27
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....COSCINODISCUS	--	-	--	-	--	-	--	-
....CYCLOTELLA	10	3	--	-	--	-	--	-
....MELOSIRA	--	-	--	-	--	-	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	51#	16	65#	63	26	11	39#	20
....RHOICOSPHENIA	--	-	13	13	--	-	--	-
...CYMBELLACEAE								
....CYMBELLA	71#	22	--	-	--	-	13	7
...FRAGILARIACEAE								
....ASTERIONELLA	--	-	--	-	210#	89	--	-
....SYNEDRA	30	10	13	13	--	-	--	-
...GOMPHONEMATACEAE								
....GOMPHONEMA	15	5	--	-	--	-	--	-
...NAVICULACEAE								
....NAVICULA	61#	19	13	13	--	-	--	-
...NITZSCHIACEAE								
....NITZSCHIA	66#	21	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....ANACYSTIS	--	-	--	-	--	-	65#	33
..HORMOGONALES								
...OSCILLATORIACEAE								
....OSCILLATORIA	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)								
.EUGLENOPHYCEAE								
..EUGLENALES								
...EUGLENACEAE								
....TRACHELOMONAS	10	3	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

14307620 SIUSLAW RIVER NEAR MAPLETON, OR--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

DATE	JUL 21,80		AUG 11,80		SEP 15,80	
TIME	1130		0000		1130	
TOTAL CELLS/ML	970		970		140	
DIVERSITY: DIVISION	1.1		1.3		0.8	
.CLASS	1.1		1.3		0.8	
..ORDER	2.2		2.1		1.1	
...FAMILY	2.4		2.2		1.1	
....GENUS	2.5		2.2		1.1	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)						
.CHLOROPHYCEAE						
..CHLOROCOCCALES						
...COCYSTACEAE						
....ANKISTRODESMUS	--	-	--	-	13	9
....SELENASTRUM	52	5	13	1	--	-
...SCENEDESMACEAE						
....SCENEDESMUS	52	5	52	5	--	-
..TETRASPORALES						
...COCCOMYXACEAE						
....ELAKATOTHRIX	52	5	--	-	--	-
...PALMELLACEAE						
....SPHAEROCYSTIS	--	-	100	11	--	-
..VOLVOCALES						
...CHLAMYDOMONADACEAE						
....CARTERIA	13	1	--	-	--	-
....CHLAMYDOMONAS	78	8	13	1	26#	18
CHRYSOPHYTA						
.BACILLARIOPHYCEAE						
..CENTRALES						
...COSCINODISCACEAE						
....COSCINODISCUS	--	-	130	13	100#	73
....CYCLOTELLA	13	1	--	-	--	-
....MELOSIRA	26	3	--	-	--	-
..PENNALES						
...ACHNANTHACEAE						
....ACHNANTHES	13	1	--	-	--	-
....RHOICOSPHENIA	--	-	--	-	--	-
...CYMBELLACEAE						
....CYMBELLA	--	-	39	4	--	-
...FRAGILARIACEAE						
....ASTERIONELLA	--	-	--	-	--	-
....SYNEDRA	13	1	--	-	--	-
...GOMPHONEMATACEAE						
....GOMPHONEMA	--	-	--	-	--	-
...NAVICULACEAE						
....NAVICULA	--	-	--	-	--	-
...NITZSCHIACEAE						
....NITZSCHIA	--	-	13	1	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)						
.CYANOPHYCEAE						
..CHROOCOCCALES						
...CHROCOCCACEAE						
....ANACYSTIS	400#	41	100	11	--	-
..HORMOGONALES						
...OSCILLATORIACEAE						
....OSCILLATORIA	260#	27	510#	52	--	-
EUGLENOPHYTA (EUGLENOIDS)						
.EUGLENOPHYCEAE						
..EUGLENALES						
...EUGLENACEAE						
....TRACHELOMONAS	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

14307620 SIUSLAW RIVER NEAR MAPLETON, OR--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	53	46	41	---	43	51	43	55	46	57	57
2	---	54	43	41	---	43	52	42	55	45	53	58
3	---	54	43	41	---	44	52	44	56	45	55	58
4	---	52	42	41	---	44	52	44	56	46	54	58
5	---	52	42	35	---	45	52	45	56	48	54	60
6	---	53	42	38	---	46	46	45	56	50	54	59
7	---	53	43	38	---	46	42	46	55	51	55	59
8	---	53	44	39	---	46	43	46	56	50	58	58
9	---	53	46	37	---	47	43	46	57	51	58	59
10	---	53	45	37	---	47	43	47	57	52	57	58
11	---	53	45	38	---	46	43	48	57	50	50	61
12	---	53	45	36	---	46	42	49	57	46	48	60
13	---	53	46	39	---	44	41	49	55	47	45	60
14	---	53	47	40	---	41	42	49	56	47	47	61
15	---	54	47	38	---	40	44	50	56	49	48	58
16	---	54	47	36	---	40	45	50	56	49	52	58
17	---	54	47	36	---	40	46	50	58	49	51	58
18	---	52	47	36	---	41	46	50	58	50	52	58
19	59	52	47	35	43	41	47	51	53	51	53	58
20	58	53	46	---	43	41	46	51	46	52	53	57
21	58	52	44	---	43	42	47	51	46	52	54	56
22	58	50	42	---	43	43	44	52	47	51	54	58
23	57	47	42	---	42	44	44	52	47	53	55	58
24	56	45	40	---	41	46	45	52	47	54	55	60
25	52	45	41	---	42	46	46	52	48	55	55	60
26	54	45	42	---	42	47	46	53	49	55	56	59
27	54	45	42	---	42	49	46	54	52	57	56	59
28	53	45	42	---	42	50	46	54	51	59	56	59
29	53	46	42	---	42	50	46	55	50	59	56	62
30	53	46	42	---	---	51	46	55	48	61	56	60
31	52	---	42	---	---	50	---	55	---	61	57	---
MEAN	55	51	44	38	42	45	46	49	53	51	54	59

14307620 SIUSLAW RIVER NEAR MAPLETON, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	20.5	17.0	11.0	10.5	8.5	7.5	9.0	8.5	4.5	2.0	9.5	9.0
2	19.5	16.5	11.0	10.5	9.5	8.5	8.5	8.5	6.0	4.5	10.0	9.0
3	19.5	16.5	11.5	11.0	10.0	8.5	8.5	8.0	6.5	6.0	10.0	9.5
4	20.0	18.0	11.5	11.0	10.0	10.0	8.0	7.0	6.5	6.5	10.5	9.5
5	20.0	18.0	11.0	10.5	9.5	9.0	8.5	8.0	6.5	6.5	10.5	9.5
6	20.0	18.0	11.0	10.5	9.0	8.5	8.0	6.5	7.0	6.5	10.0	9.5
7	18.0	16.5	11.0	10.0	8.5	8.5	6.5	6.0	7.0	7.0	10.5	9.5
8	18.0	16.0	10.0	9.5	9.0	8.5	7.0	6.0	7.0	6.5	10.5	9.0
9	18.0	15.5	10.5	9.0	9.0	8.5	7.5	7.0	6.5	6.5	10.5	9.0
10	18.0	15.0	9.5	9.0	9.0	8.0	7.0	6.5	7.0	6.5	9.5	9.0
11	17.0	15.5	9.5	8.0	8.0	6.5	7.5	6.5	7.0	6.0	9.0	8.0
12	17.0	15.5	8.5	7.5	7.5	6.5	9.0	7.5	6.0	5.5	8.0	7.5
13	16.0	15.0	7.5	6.5	8.0	7.5	9.5	8.5	6.0	5.5	8.0	7.5
14	16.0	15.5	7.0	5.5	8.5	8.0	9.0	9.0	6.0	6.0	8.5	8.0
15	17.0	15.5	7.0	5.0	9.0	8.5	8.5	8.5	6.5	6.0	8.0	7.0
16	17.0	15.0	8.5	7.0	8.5	7.5	8.5	8.5	6.5	6.0	8.0	7.0
17	16.5	14.0	9.0	8.5	9.0	7.5	8.5	7.5	6.5	6.0	8.5	7.5
18	15.0	13.0	9.0	8.0	9.0	9.0	7.5	6.0	7.0	6.5	9.0	8.0
19	13.0	12.0	8.0	7.5	9.5	9.0	6.5	5.5	8.5	7.0	9.0	8.5
20	12.0	11.0	8.0	7.0	9.5	9.0	6.0	6.0	8.5	8.0	9.0	8.5
21	11.0	10.5	7.0	6.5	9.5	8.5	6.0	5.5	8.0	7.5	9.0	8.0
22	11.5	11.0	8.0	7.0	8.5	8.0	5.5	5.5	8.0	7.5	9.5	8.5
23	13.0	11.5	8.5	8.0	8.0	7.5	5.5	5.5	8.0	7.5	9.5	8.5
24	13.0	12.0	9.5	8.5	8.5	7.5	5.5	5.5	9.0	8.0	10.0	8.0
25	13.0	12.0	9.0	8.0	8.0	8.0	6.0	5.5	9.0	9.0	10.5	8.5
26	12.5	11.5	8.0	7.5	8.0	7.5	6.0	5.5	9.5	9.0	9.5	9.0
27	13.0	12.0	8.0	7.5	7.5	6.5	5.5	3.5	10.0	9.5	10.0	8.0
28	12.0	11.0	7.5	6.5	6.5	6.0	3.5	1.5	10.0	9.5	10.5	8.5
29	11.5	11.0	7.5	7.0	7.0	6.5	1.5	1.0	9.5	8.5	10.5	9.0
30	11.0	10.5	8.0	7.5	7.5	7.0	1.0	1.0	---	---	10.5	8.5
31	12.0	11.0	---	---	8.5	7.5	3.0	1.0	---	---	9.5	8.5
MONTH	20.5	10.5	11.5	5.0	10.0	6.0	9.5	1.0	10.0	2.0	10.5	7.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	10.0	8.0	15.5	12.0	17.0	15.5	23.5	19.0	25.0	20.5	21.0	16.5
2	11.0	8.0	13.5	12.5	15.5	14.0	21.5	19.0	23.0	20.5	22.0	19.0
3	9.5	8.5	15.5	11.5	15.5	13.0	20.0	16.5	23.5	19.0	22.0	17.5
4	9.5	8.5	13.5	12.5	18.0	13.0	17.5	16.0	24.0	19.5	21.5	17.0
5	9.0	8.5	14.0	11.5	16.5	14.0	18.0	15.5	23.0	19.5	22.0	17.5
6	8.5	7.0	14.0	12.0	15.0	14.0	21.5	15.5	23.5	19.5	19.0	18.0
7	8.5	7.5	15.5	11.5	15.5	13.0	23.0	18.0	24.0	20.0	22.0	17.5
8	9.0	8.5	13.5	12.5	16.5	14.0	21.5	18.5	24.5	20.5	22.0	16.5
9	10.0	9.0	13.0	11.5	17.0	14.5	19.5	17.0	25.5	21.0	23.0	17.5
10	10.5	9.0	11.5	11.0	16.0	15.0	21.5	17.0	25.0	21.5	20.0	18.0
11	11.0	8.5	12.0	11.0	16.0	14.0	22.5	18.5	22.5	20.5	22.5	17.5
12	12.5	9.5	13.0	11.5	16.5	14.0	22.5	19.0	24.0	20.0	20.0	17.5
13	12.0	10.5	13.0	11.5	15.5	14.0	23.0	19.0	23.0	20.5	17.5	15.5
14	11.5	10.5	13.5	11.0	15.0	13.5	23.0	20.0	22.5	19.5	19.0	14.5
15	12.5	10.0	14.0	11.0	18.5	13.5	25.0	19.5	21.5	18.5	20.0	15.5
16	13.0	10.5	16.0	11.0	17.0	15.5	25.5	20.5	23.5	19.0	20.0	15.5
17	13.0	11.0	18.0	12.5	20.5	14.5	25.5	20.0	23.0	20.0	20.0	16.0
18	13.0	11.0	18.0	14.0	21.5	16.0	25.0	20.5	20.5	19.0	17.5	15.5
19	12.5	12.0	18.0	14.5	22.0	16.5	25.5	20.0	23.0	17.5	16.5	15.5
20	11.5	10.5	19.0	14.0	20.5	17.5	27.0	21.5	22.0	18.5	17.0	15.0
21	10.5	10.0	16.5	14.5	19.0	16.5	27.0	23.0	22.0	17.5	16.5	14.5
22	11.0	10.0	16.0	13.5	18.5	16.0	24.5	21.0	22.5	18.0	18.5	14.5
23	11.5	10.0	15.5	13.0	17.5	16.0	25.0	20.0	23.0	18.0	18.5	15.0
24	12.5	10.5	14.0	12.0	17.0	15.5	25.5	20.5	23.0	19.5	19.0	15.0
25	12.5	10.5	13.5	12.5	16.0	14.5	25.5	20.5	22.5	18.0	19.0	15.5
26	14.0	10.5	13.0	11.5	17.5	14.5	27.0	21.5	22.0	18.5	17.0	15.5
27	15.5	12.0	14.0	11.5	21.5	15.0	28.5	22.5	20.5	18.5	16.0	15.0
28	14.5	13.0	16.5	12.0	23.0	17.5	27.5	23.0	21.0	16.5	17.0	15.0
29	14.0	12.0	17.0	13.5	22.5	17.5	26.0	21.0	21.5	17.0	19.0	15.5
30	15.0	11.0	19.0	14.5	23.0	18.0	26.0	21.0	18.5	17.0	20.5	17.0
31	---	---	19.0	15.0	---	---	25.5	22.0	19.0	16.5	---	---
MONTH	15.5	7.0	19.0	11.0	23.0	13.0	28.5	15.5	25.5	16.5	23.0	14.5

14307645 NORTH FORK SIUSLAW RIVER NEAR MINERVA, OR

LOCATION.--Lat 44°02'50", long 124°00'10", in NW¼SW¼ sec.34, T.17 S., R.11 W., Lane County, Hydrologic Unit 17100206, on left bank 10 ft (3 m) downstream from county road bridge, 0.3 mi (0.5 km) upstream from Condon Creek, 2.7 mi (4.3 km) southwest of Minerva, and at mile 13.09 (21.06 km).

DRAINAGE AREA.--41.2 mi² (106.7 km²).

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 40 ft (12 m), from topographic map.

REMARKS.--Records fair. No regulation. Small diversions for irrigation above station.

AVERAGE DISCHARGE.--13 years, 286 ft³/s (8.100 m³/s), 94.27 in/yr (2,394 mm/yr), 207,200 acre-ft/yr (255 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,040 ft³/s (86.1 m³/s) Jan. 21, 1972, gage height, 23.01 ft (7.013 m); maximum gage height, 23.38 ft (7.126 m) Dec. 1, 1975 (backwater from debris); minimum discharge, 11 ft³/s (0.31 m³/s) Sept. 9-11, 17, 18, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,800 ft³/s (51.0 m³/s) and maximum discharge, 2,080 ft³/s (58.9 m³/s) Dec. 4, gage height, 18.57 ft (5.660 m); minimum, 11 ft³/s (0.31 m³/s) Sept. 9-11, 17, 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	355	376	350	262	352	175	127	72	49	26	21
2	16	281	1210	330	443	306	158	142	78	50	26	26
3	14	312	1070	336	596	273	154	133	81	50	26	25
4	14	406	1690	339	400	257	162	126	74	78	25	21
5	14	601	1390	781	330	242	230	119	71	59	25	16
6	14	451	844	578	361	220	600	110	66	52	25	12
7	14	329	557	446	329	202	660	104	73	48	25	12
8	15	258	424	568	300	185	520	103	64	45	25	12
9	14	214	364	962	270	173	540	126	60	46	24	11
10	12	183	331	990	242	173	560	108	59	46	22	11
11	14	163	271	763	219	206	450	103	59	43	22	11
12	15	149	295	851	204	232	364	101	61	42	22	12
13	16	138	270	1140	200	572	298	95	73	42	22	12
14	17	130	250	1390	185	787	289	93	82	40	22	12
15	18	126	238	1160	170	593	263	90	68	40	22	12
16	17	135	215	938	160	460	237	88	58	38	22	12
17	17	163	255	767	170	427	215	85	56	37	21	12
18	53	297	480	617	260	438	196	83	54	36	20	11
19	222	472	448	511	410	384	217	82	52	35	20	15
20	576	342	439	428	380	362	267	79	51	34	20	44
21	274	283	674	365	320	347	331	81	50	33	20	24
22	178	439	707	318	320	318	293	89	50	33	19	18
23	178	622	642	281	480	286	247	93	52	34	19	16
24	188	1150	766	250	440	264	241	96	58	32	19	15
25	707	977	692	227	390	239	207	98	66	31	20	14
26	391	852	574	206	457	252	192	102	70	30	19	14
27	343	694	484	185	496	231	172	112	65	29	19	14
28	263	565	415	167	458	213	152	96	58	29	19	15
29	209	480	361	153	404	204	142	85	53	27	20	18
30	239	413	336	144	---	186	135	81	50	27	20	17
31	530	---	331	139	---	188	---	77	---	26	21	---
TOTAL	4608	11980	17399	16680	9656	9572	8667	3107	1884	1241	677	485
MEAN	149	399	561	538	333	309	289	100	62.8	40.0	21.8	16.2
MAX	707	1150	1690	1390	596	787	660	142	82	78	26	44
MIN	12	126	215	139	160	173	135	77	50	26	19	11
CFSM	3.62	9.68	13.6	13.1	8.08	7.50	7.02	2.43	1.52	.97	.53	.39
IN.	4.16	10.82	15.71	15.06	8.72	8.64	7.83	2.81	1.70	1.12	.61	.44
AC-FT	9140	23760	34510	33080	19150	18990	17190	6160	3740	2460	1340	962

CAL YR 1979 TOTAL 97195 MEAN 266 MAX 2140 MIN 12 CFSM 6.46 IN 87.76 AC-FT 192800
WTR YR 1980 TOTAL 85956 MEAN 235 MAX 1690 MIN 11 CFSM 5.70 IN 77.61 AC-FT 170500

14307700 JACKSON CREEK NEAR TILLER, OR

LOCATION.--Lat 42°57'15", long 122°49'40", in SW¼NE¼ sec.21 T.30 S., R.1 W., Douglas County, Hydrologic Unit 17100302, on right bank 0.5 mi (0.8 km) upstream from Chapman Creek, 0.8 mi (1.3 km) downstream from Beaver Creek, 6.5 mi (10.5 km) northeast of Tiller, and at mile 3.0 (4.8 km). Records include flow of Chapman Creek.

DRAINAGE AREA.--152 mi² (394 km²), at cableway 0.6 mi (1.0 km) downstream where all discharge measurements are made.

PERIOD OF RECORD.--October 1955 to current year.

REVISED RECORDS.--WSP 1935: 1956-57(M).

GAGE.--Water-stage recorder. Datum of gage is 1,240.25 ft (378.028 m) National Geodetic Vertical Datum of 1929 (levels by Douglas County Water Resources Survey).

REMARKS.--Records good except those for period of no gage-height record, which are fair. No regulation or diversion above station.

AVERAGE DISCHARGE.--25 years, 314 ft³/s (8.892 m³/s), 28.05 in/yr (712 mm/yr), 227,500 acre-ft/yr (281 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,100 ft³/s (598 m³/s) Dec. 22, 1964, gage height, 18.0 ft (5.49 m), from floodmark, from rating curve extended above 5,100 ft³/s (144 m³/s) and basin runoff comparison; minimum, 11 ft³/s (0.31 m³/s) Jan. 6, 1977, Nov. 13, 1978, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,500 ft³/s (70.8 m³/s) and maximum discharge, 4,800 ft³/s (136 m³/s) Jan. 13, gage height, 8.48 ft (2.585 m); minimum, 18 ft³/s (0.51 m³/s) Oct. 11-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	277	231	687	177	468	268	285	209	68	29	20
2	19	200	434	483	175	398	252	266	207	64	28	20
3	19	163	922	384	266	402	234	255	234	61	28	20
4	19	234	729	344	260	445	226	252	231	60	27	21
5	19	388	720	616	244	424	334	247	247	59	27	21
6	19	277	526	687	282	398	424	229	229	58	27	20
7	19	204	413	522	268	354	405	207	216	56	27	20
8	19	161	331	424	249	309	453	193	195	53	27	20
9	19	132	277	354	226	277	678	219	179	51	26	20
10	19	112	274	328	209	249	744	271	165	51	25	20
11	18	94	234	297	191	268	616	300	155	49	25	20
12	18	83	207	2330	177	257	547	300	153	46	24	20
13	19	73	186	3800	167	344	594	282	151	46	23	20
14	26	65	167	2980	155	986	607	268	147	44	23	21
15	39	59	153	1910	147	808	530	252	137	43	23	20
16	26	71	139	1450	143	589	483	231	128	42	23	20
17	22	143	130	1480	153	530	494	211	125	41	23	20
18	39	277	122	1070	360	572	479	200	117	39	22	23
19	249	274	118	798	576	514	453	188	110	38	22	28
20	244	214	113	624	839	526	581	179	104	38	22	26
21	229	173	171	514	642	502	696	171	97	37	21	32
22	123	219	204	438	534	442	572	171	93	36	21	25
23	145	413	197	377	475	395	510	173	108	35	21	23
24	137	901	231	334	409	354	475	188	94	35	20	22
25	589	710	211	300	364	331	431	303	94	35	20	21
26	280	514	177	271	344	325	395	347	91	33	20	21
27	179	391	159	247	364	334	391	318	86	33	20	20
28	145	306	145	219	611	303	413	291	79	32	20	20
29	125	271	137	186	547	285	370	266	75	31	20	20
30	143	247	171	193	---	277	321	241	72	30	20	20
31	280	---	850	184	---	274	---	219	---	30	20	---
TOTAL	3265	7646	9079	24831	9554	12940	13976	7523	4328	1374	724	644
MEAN	105	255	293	801	329	417	466	243	144	44.3	23.4	21.5
MAX	589	901	922	3800	839	986	744	347	247	68	29	32
MIN	18	59	113	184	143	249	226	171	72	30	20	20
CFSM	.69	1.68	1.93	5.27	2.16	2.74	3.07	1.60	.95	.29	.15	.14
IN.	.80	1.87	2.22	6.08	2.34	3.17	3.42	1.84	1.06	.34	.18	.16
AC-FT	6480	15170	18010	49250	18950	25670	27720	14920	8580	2730	1440	1280

CAL YR 1979 TOTAL 105534 MEAN 289 MAX 3700 MIN 18 CFSM 1.90 IN 25.83 AC-FT 209300
WTR YR 1980 TOTAL 95884 MEAN 262 MAX 3800 MIN 18 CFSM 1.72 IN 23.47 AC-FT 190200

NOTE.--No gage-height record July 27 to Sept. 3.

14308000 SOUTH UMPQUA RIVER AT TILLER, OR

LOCATION.--Lat 42°55'50", long 122°56'50", in NE¼ sec.33, T.30 S., R.2 W., Douglas County, Hydrologic Unit 17100302, on right bank 0.3 mi (0.5 km) upstream from bridge on State Highway 227 at Tiller, 0.3 mi (0.5 km) upstream from Elk Creek, and at mile 187.31 (301.38 km).

DRAINAGE AREA.--449 mi² (1,163 km²).

PERIOD OF RECORD.--October 1910 to December 1911, October 1939 to current year. Monthly discharge only for some periods, published in WSP 1318. Prior to December 1911, published as South Fork of Umpqua River at Tiller.

REVISED RECORDS.--WSP 1448: 1911(M), 1912, drainage area.

GAGE.--Water-stage recorder. Datum of gage is 991.8 ft (302.30 m) National Geodetic Vertical Datum of 1929 (river-profile survey). Prior to Oct. 1, 1939, nonrecording gage at site 0.2 mi (0.3 km) downstream at different datum.

REMARKS.--Records good. No regulation. Small diversions for irrigation above station.

AVERAGE DISCHARGE.--42 years, 1,035 ft³/s (29.31 m³/s), 31.30 in/yr (795 mm/yr), 749,900 acre-ft/yr (925 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 60,200 ft³/s (1,700 m³/s) Dec. 22, 1964, gage height, 25.72 ft (7.839 m); minimum observed, 20 ft³/s (0.57 m³/s) Sept. 3, 4, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 7,000 ft³/s (198 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 3	0330	8,870	251	9.83	3.00	Jan. 13	1430	*15,100	428	*12.79	3.90

Minimum, 42 ft³/s (1.19 m³/s) Oct. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	113e	936	1860	557	1430	929	820e	519	217	76	51
2	46	701	233e	146e	557	1220	862	763	529	205	74	51
3	46	543	607e	119e	1090	1200	803	723	607	194	73	53
4	46	701	3380	1060	115e	1470	763	707	602	191	73	54
5	44	156e	309e	237e	967	1390	898	691	617	188	71	51
6	44	987	216e	2770	113e	1290	1210	653	582	182	71	50
7	44	694	161e	1930	1090	1120	1300	607	553	177	69	48
8	46	538	1280	1480	987	98e	1640	567	510	163	69	47
9	46	434	1050	123e	880	868	2640	648	473	158	67	47
10	46	364	1020	1180	785	785	2880	820	447	158	66	47
11	43	315	868	103e	718	82e	2350	886	421	150	64	48
12	43	276	763	7880	659	809	1970	88e	413	145	62	46
13	43	246	680	13200	612	113e	2040	820	417	140	61	47
14	54	224	612	10500	572	4150	2050	768	421	135	61	50
15	110	205	557	6860	538	3210	179e	712	396	133	61	51
16	84	249	51e	5190	505	2200	1580	659	376	126	59	48
17	64	524	473	5020	501	1870	1580	602	368	121	59	47
18	76	117e	438	3540	718	2150	150e	567	348	117	59	51
19	826	120e	43e	262e	1090	1960	1380	543	329	112	59	80
20	803	967	421	2030	1940	1930	1650	519	315	110	58	76
21	809	751	911	162e	1590	1820	2220	501	297	110	56	86
22	384	850	1220	135e	1430	153e	179e	501	283	104	54	74
23	400	185e	942	1150	1580	1360	153e	515	318	100	54	62
24	409	457e	898	101e	1320	1220	1390	543	304	98	53	58
25	1690	329e	809	911	116e	1120	1250	809	280	95	53	56
26	905	2230	691	832	1090	1090	1140	874	270	91	53	53
27	553	158e	617	763	1e80	1140	109e	774	27e	91	53	50
28	443	122e	567	685	1710	1030	113e	701	260	88	51	5e
29	380	1080	529	602	168e	974	1e30	643	240	84	51	48
30	404	1010	577	602	---	955	911	592	23e	82	51	47
31	1240	---	1860	577	---	936	---	543	---	78	51	---
TOTAL	10218	31459	38299	84502	29686	45157	45296	20951	11995	4143	1892	1627
MEAN	330	1049	1235	2726	1024	1457	151e	676	400	134	61.0	54.2
MAX	169e	4570	6070	13200	1940	4150	2880	886	617	217	76	86
MIN	43	2e5	421	577	501	785	763	501	230	78	51	46
CFSM	.74	2.34	2.75	6.07	2.28	3.25	3.36	1.51	.89	.30	.14	.12
IN.	.85	2.61	3.17	7.00	2.46	3.74	3.75	1.74	.99	.34	.16	.13
AC-FT	20270	62400	75970	167600	58880	8957e	89840	41560	23790	8220	3750	3230

CAL YR 1979	TOTAL 358911	MEAN 983	MAX 16300	MIN 43	CFSM 2.19	IN 29.74	AC-FT 711900		
WTR YR 198e	TOTAL 325225	MEAN 889	MAX 132e0	MIN 43	CFSM 1.98	IN 26.95	AC-FT 6451e0		

14308500 ELK CREEK NEAR DREW, OR

LOCATION.--Lat 42°53'25", long 122°55'00", in SW¼ sec.11, T.31 S., R.2 W., Douglas County, Hydrologic Unit 17100302, on right bank 100 ft (30 m) downstream from Dixon Creek, 0.1 mi (0.2 km) upstream from Drew Creek, 1.3 mi (2.1 km) northwest of Drew, 3.3 mi (5.3 km) southeast of Tiller, and at mile 4.1 (6.6 km).

DRAINAGE AREA.--54.4 mi² (140.9 km²).

PERIOD OF RECORD.--September 1954 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,279.25 ft (389.915 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for period of no gage-height record Oct. 23 to Dec. 3, which are fair. No regulation. Several diversions for irrigation above station.

AVERAGE DISCHARGE.--26 years, 84.7 ft³/s (2.399 m³/s), 61,370 acre-ft/yr (75.7 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,880 ft³/s (251 m³/s) Dec. 22, 1964, gage height, 10.61 ft (3.234 m), from rating curve extended above 2,900 ft³/s (82.1 m³/s) on basis of slope-area measurement at gage height 10.34 ft (3.152 m); maximum gage height, 10.80 ft (3.292 m) Jan. 15, 1974; no flow at times in September 1974, and Aug. 16-22, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage, 11.8 ft (3.60 m), from floodmarks, probably for flood in January or November 1953, discharge, about 11,000 ft³/s (312 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s (28.3 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 31	0700	1,970	55.8	6.54	1.993	Jan. 12	0800	*3,670	104	*7.93	2.417

Minimum, 0.42 ft³/s (0.012 m³/s) Sept. 12, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.60	38	40	423	44	103	80	42	44	10	1.9	.71
2	.82	34	100	239	38	87	73	38	47	9.4	1.6	.55
3	1.4	32	550	164	66	111	67	36	66	8.9	1.6	.63
4	1.1	30	330	131	63	137	66	33	69	8.9	1.9	.71
5	.95	60	308	194	56	124	96	30	61	8.9	1.6	.71
6	.71	50	188	172	53	131	162	27	54	8.9	1.9	.55
7	.82	40	133	131	47	103	154	26	49	8.4	2.1	.55
8	.95	34	100	107	44	87	167	24	43	7.4	1.6	.63
9	.95	30	78	92	41	77	229	34	37	7.0	1.4	.71
10	.95	26	73	92	37	66	202	60	34	7.0	1.4	.71
11	.82	24	61	109	35	69	157	92	30	6.5	1.1	.55
12	.82	22	53	2060	33	64	128	87	29	6.0	.95	.48
13	1.1	21	47	2240	30	109	120	69	27	6.0	.95	.55
14	2.7	20	42	1280	29	615	111	61	26	5.1	1.4	.82
15	7.0	19	37	649	27	355	96	56	24	5.1	1.4	.71
16	4.7	22	34	514	26	233	80	49	23	4.7	1.6	.71
17	3.7	34	30	544	33	191	70	42	23	4.3	1.6	.63
18	4.0	44	28	347	137	208	63	37	22	4.3	1.6	.71
19	35	50	29	236	226	175	56	33	20	4.0	1.6	1.9
20	82	42	31	175	269	172	111	29	18	4.0	1.1	2.1
21	72	34	101	137	185	159	229	27	17	3.7	1.1	2.1
22	30	70	124	113	185	135	157	27	16	3.3	1.1	1.9
23	40	110	133	94	180	120	128	28	17	3.1	.95	1.4
24	45	300	211	82	135	107	107	48	16	3.1	.82	1.4
25	250	170	142	72	109	94	89	167	15	3.1	.95	.95
26	70	120	100	64	94	90	77	152	14	2.4	.82	.95
27	50	90	78	57	94	87	66	107	13	2.7	.71	.82
28	40	70	66	51	159	77	57	82	12	2.4	1.1	.71
29	36	55	59	48	126	70	52	64	12	2.4	1.1	.63
30	34	48	82	46	---	66	46	54	11	2.4	.95	.55
31	42	---	978	45	---	70	---	48	---	2.1	.95	---
TOTAL	860.09	1739	4366	10708	2601	4292	3296	1709	889	165.5	40.85	27.03
MEAN	27.7	58.0	141	345	89.7	138	110	55.1	29.6	5.34	1.32	.90
MAX	250	300	978	2240	269	615	229	167	69	10	2.1	2.1
MIN	.60	19	28	45	26	64	46	24	11	2.1	.71	.48
AC-FT	1710	3450	8660	21240	5160	8510	6540	3390	1760	328	81	54

CAL YR 1979	TOTAL	28566.49	MEAN	78.3	MAX	1280	MIN	.32	AC-FT	56660
WTR YR 1980	TOTAL	30693.47	MEAN	83.9	MAX	2240	MIN	.48	AC-FT	60880

14308600 SOUTH UMPQUA RIVER AT DAYS CREEK, OR

LOCATION.--Lat 42°58'05", long 123°09'60", in NW¼ sec.15, T.30 S., R.4 W., Douglas County, Hydrologic Unit 17100302, on left bank 0.3 mi (0.5 km) upstream from Days Creek, 0.4 mi (0.6 km) southeast of community of Days Creek, and at mile 170.2 (273.9 km).

DRAINAGE AREA.--641 mi² (1,660 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is 738.55 ft (225.110 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good. No regulation. Many small diversions for irrigation above station.

AVERAGE DISCHARGE.--5 years, 1,014 ft³/s (28.72 m³/s), 21.48 in/yr (546 mm/yr), 734,600 acre-ft/yr (906 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,500 ft³/s (807 m³/s) Nov. 24, 1977, gage height, 18.32 ft (5.584 m); minimum, 31 ft³/s (0.88 m³/s) Sept. 15, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 12,000 ft³/s (340 m³/s) and maximum discharge, 18,500 ft³/s (524 m³/s) Jan. 13, gage height, 14.81 ft (4.514 m); minimum, 42 ft³/s (1.19 m³/s) Oct. 12, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	1370	1100	2550	659	1720	1180	962	592	229	87	54
2	48	833	2030	1940	659	1480	1080	880	603	215	85	54
3	48	625	7450	1560	1090	1410	991	833	706	206	82	54
4	48	597	4080	1370	1390	1780	941	793	736	202	80	56
5	47	1700	3960	2590	1170	1680	1070	774	755	202	80	56
6	45	1170	2660	3390	1250	1610	1520	730	706	198	79	53
7	45	813	1990	2380	1270	1400	1690	676	659	192	79	50
8	45	608	1570	1860	1140	1220	1940	630	597	183	79	48
9	47	489	1280	1530	1020	1080	2940	688	536	175	77	47
10	47	411	1210	1500	921	969	3360	934	507	170	74	46
11	46	352	1060	1300	846	984	2790	1060	471	170	69	45
12	42	316	914	9640	774	998	2320	1070	449	164	65	47
13	44	285	800	16000	712	1210	2310	969	444	161	64	47
14	57	260	712	13300	659	5230	2330	907	444	154	64	51
15	109	241	641	8900	619	4330	2090	840	423	149	64	54
16	130	251	586	6540	576	2900	1820	768	391	145	65	54
17	91	475	545	6600	565	2410	1780	694	379	139	65	51
18	84	1270	507	4610	846	2730	1700	641	364	132	64	53
19	688	1490	493	3310	1370	2520	1570	603	338	130	62	67
20	893	1180	493	2570	2330	2380	1750	576	322	127	61	98
21	1060	893	1170	2090	2020	2300	2750	545	304	124	59	91
22	480	880	1760	1740	1840	1950	2240	536	291	117	57	104
23	436	2300	1380	1480	2100	1730	1900	565	313	112	58	82
24	475	5000	1430	1310	1750	1540	1700	597	319	112	57	72
25	2030	3980	1220	1170	1490	1410	1520	1010	291	109	56	68
26	1230	2730	984	1050	1380	1340	1380	1190	291	106	56	66
27	682	1980	840	948	1320	1400	1300	1030	283	104	54	62
28	526	1510	749	846	1960	1280	1320	887	262	101	53	59
29	457	1310	682	724	2010	1190	1220	774	249	97	53	57
30	449	1210	712	682	---	1150	1070	694	239	92	54	54
31	1220	---	2520	706	---	1120	---	636	---	91	54	---
TOTAL	11699	36529	47528	106186	35736	56451	53572	24492	13264	4608	2056	1800
MEAN	377	1218	1533	3425	1232	1821	1786	790	442	149	66.3	60.0
MAX	2030	5000	7450	16000	2330	5230	3360	1190	755	229	87	104
MIN	42	241	493	682	565	969	941	536	239	91	53	45
CFSM	.59	1.90	2.39	5.34	1.92	2.84	2.79	1.23	.69	.23	.10	.09
IN.	.68	2.12	2.76	6.16	2.07	3.28	3.11	1.42	.77	.27	.12	.10
AC-FT	23200	72460	94270	210600	70880	112000	106300	48580	26310	9140	4080	3570

CAL YR 1979 TOTAL 439626 MEAN 1204 MAX 18000 MIN 42 CFSM 1.88 IN 25.51 AC-FT 872000
WTR YR 1980 TOTAL 393921 MEAN 1076 MAX 16000 MIN 42 CFSM 1.68 IN 22.86 AC-FT 781300

14308600 SOUTH UMPQUA RIVER AT DAYS CREEK, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1971 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1970 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 30.0°C July 25, 1978; minimum, 0.0°C on many days during 1972, 1976-79.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 28.0°C July 21, 22; minimum recorded, 2.5°C Dec. 28.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	PH FIELD (UNITS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SILICA, DIS-SOLVED (MG/L AS SIO2)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
OCT										
30...	1200	429	11.0	7.6	93	17	9.8	2.7	5.4	.7
FEB										
13...	--	735	5.5	7.4	86	17	8.2	2.2	3.8	.5
JUN										
03...	1145	772	13.0	7.5	74	17	8.4	2.3	4.1	.6

DATE	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT										
30...	37	5.9	3.9	.1	.17	.040	36	0	69	79.9
FEB										
13...	25	2.4	3.0	.0	.04	.040	30	5	52	103
JUN										
03...	39	2.2	2.6	.0	.02	.020	30	0	61	127

14308600 SOUTH UMPQUA RIVER AT DAYS CREEK, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	18.0	13.5	10.0	9.0	6.5	6.0	6.5	6.5	---	---	7.0	6.5
2	18.0	12.5	9.5	9.0	7.5	6.5	6.5	6.0	---	---	8.0	6.5
3	19.5	13.5	9.0	8.5	8.0	7.5	6.5	6.0	---	---	8.0	8.0
4	20.5	14.5	9.5	9.0	8.0	7.0	7.0	6.5	---	---	8.0	7.0
5	20.0	13.5	9.0	8.5	7.5	6.5	7.0	7.0	---	---	8.0	7.0
6	18.5	14.5	9.0	8.5	6.5	6.0	7.0	6.0	---	---	7.5	7.0
7	17.5	14.0	9.5	8.5	6.5	6.0	6.0	5.5	---	---	8.0	6.5
8	16.5	13.0	8.5	7.5	7.0	5.5	5.5	5.0	---	---	7.5	6.5
9	17.5	12.5	7.5	6.5	---	---	5.5	5.5	---	---	8.0	6.5
10	17.5	11.5	8.0	6.5	---	---	5.5	3.5	---	---	8.0	6.5
11	17.0	11.5	7.5	6.0	---	---	4.0	3.0	---	---	7.5	6.5
12	17.5	11.5	6.5	5.5	---	---	7.0	4.0	---	---	6.5	5.5
13	18.5	14.0	6.5	5.0	---	---	7.5	7.0	5.0	---	6.0	5.5
14	15.5	14.5	6.0	4.5	---	---	7.5	7.0	5.0	3.5	6.5	5.5
15	17.0	14.5	5.5	4.0	---	---	7.0	6.5	6.0	4.0	---	---
16	17.0	14.0	6.0	5.0	---	---	7.0	4.5	6.5	5.0	---	---
17	16.0	14.5	7.5	5.5	---	---	5.0	4.0	7.5	6.0	---	---
18	15.5	13.5	7.5	7.0	---	---	5.0	4.0	7.5	6.5	---	---
19	13.5	10.5	7.0	5.5	7.0	---	6.0	4.5	7.0	6.5	---	---
20	10.5	9.5	6.0	5.0	7.0	6.5	5.0	4.0	7.0	6.5	---	---
21	9.5	8.5	5.5	4.5	7.0	6.5	---	---	6.5	5.5	---	---
22	10.0	9.0	6.0	5.5	6.5	5.0	---	---	6.0	5.5	---	---
23	11.0	9.5	6.0	5.5	5.0	5.0	---	---	6.0	5.0	---	---
24	12.0	10.5	7.5	6.0	5.5	5.0	---	---	7.5	6.0	---	---
25	11.5	10.5	7.5	6.0	5.5	4.5	---	---	7.5	7.0	---	---
26	11.0	10.0	6.0	5.5	5.0	4.5	---	---	8.5	7.0	---	---
27	11.0	10.0	5.5	4.5	4.5	3.0	---	---	8.0	7.5	---	---
28	11.0	10.0	5.0	4.0	3.0	2.5	---	---	8.5	7.5	---	---
29	11.0	9.5	5.5	4.5	4.5	3.0	---	---	7.5	7.0	---	---
30	10.0	9.0	6.5	5.0	5.5	4.0	---	---	---	---	---	---
31	10.0	9.0	---	---	6.5	5.0	---	---	---	---	---	---
MONTH	20.5	8.5	10.0	4.0	8.0	2.5	7.5	3.0	8.5	3.5	8.0	5.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	13.0	10.0	14.5	13.0	23.5	17.5	26.0	21.0	21.0	17.0
2	---	---	11.5	11.0	13.5	12.0	22.5	19.0	25.5	20.5	20.0	18.5
3	---	---	14.5	10.5	12.5	11.0	21.0	18.5	25.0	21.0	20.5	17.0
4	---	---	16.0	13.5	13.5	11.0	20.5	18.0	24.5	20.0	21.0	16.5
5	---	---	16.0	13.5	13.0	12.0	19.5	17.5	23.0	19.5	21.5	17.5
6	---	---	15.0	12.5	13.5	11.5	21.5	16.5	22.5	18.0	21.0	18.5
7	---	---	14.5	12.0	15.0	12.0	23.5	17.0	23.5	18.5	21.0	19.0
8	---	---	13.5	12.0	17.0	13.5	23.5	18.5	23.5	19.0	21.0	17.0
9	---	---	12.0	10.5	18.0	15.0	22.0	19.0	24.5	19.5	22.0	17.5
10	---	---	10.5	8.5	18.5	15.5	24.0	18.5	25.0	20.0	22.0	19.0
11	---	---	9.5	8.5	17.0	15.5	24.5	18.5	24.5	20.5	21.0	18.0
12	---	---	11.0	9.0	17.0	14.5	23.5	19.5	24.0	20.5	20.5	18.0
13	---	---	11.0	10.5	15.0	13.5	24.0	18.5	23.0	19.5	18.0	16.5
14	---	---	11.0	10.0	16.0	13.0	25.0	20.0	22.5	20.0	18.0	14.5
15	10.0	---	11.5	10.0	18.0	13.5	25.5	19.5	22.5	18.5	18.5	15.0
16	10.5	8.5	13.5	10.5	16.0	15.0	26.0	20.5	22.5	19.0	19.5	15.5
17	11.0	9.5	14.5	11.0	17.5	14.0	25.5	20.5	22.5	19.0	19.0	16.0
18	10.5	9.0	15.5	12.0	19.0	14.5	25.5	20.5	21.5	19.5	19.0	17.5
19	11.5	9.5	17.0	13.5	20.0	16.0	26.0	20.0	22.0	17.5	18.5	17.0
20	10.5	8.5	18.0	14.0	21.0	17.0	27.0	20.5	22.5	18.0	18.5	16.5
21	8.5	6.5	17.0	15.0	21.0	17.5	28.0	22.0	21.5	18.0	18.5	15.5
22	7.5	7.0	15.5	13.0	20.0	18.0	28.0	23.0	21.5	18.0	18.5	14.5
23	10.5	7.5	13.5	11.0	18.5	17.0	25.0	22.5	22.5	18.0	18.5	14.5
24	11.5	10.0	11.5	10.5	18.0	16.0	25.5	20.0	21.5	19.0	18.5	15.5
25	11.0	9.5	10.5	9.5	18.0	15.5	25.5	20.0	22.0	18.0	19.0	16.0
26	12.5	10.0	11.0	9.0	18.5	14.5	26.5	20.5	21.5	18.5	19.0	17.0
27	14.0	11.0	12.5	10.0	20.5	16.0	27.0	21.0	21.0	19.0	18.5	16.5
28	14.0	12.0	13.5	12.0	21.0	17.0	27.0	22.0	21.0	18.5	19.0	15.5
29	12.5	10.5	15.0	12.0	20.0	17.5	26.5	22.0	19.5	17.0	18.5	15.5
30	12.0	10.0	14.5	13.5	21.5	16.5	26.5	21.5	19.5	16.0	18.5	16.0
31	---	---	15.5	13.0	---	---	26.5	22.0	20.5	17.5	---	---
MONTH	14.0	6.5	18.0	8.5	21.5	11.0	28.0	16.5	26.0	16.0	22.0	14.5

14309000 COW CREEK NEAR AZALEA, OR

LOCATION.--Lat 42°49'30", long 123°10'40", in N½ sec.4, T.32 S., R.4 W., Douglas County, Hydrologic Unit 17100302, on right bank 0.8 mi (1.3 km) upstream from Whitehorse Creek, 4.5 mi (7.2 km) northeast of Azalea, and at mile 58.2 (93.6 km).

DRAINAGE AREA.--78.0 mi² (202.0 km²).

PERIOD OF RECORD.--April 1926 to September 1928 (no winter records), April 1929 to December 1931, April 1932 to current year.

REVISED RECORDS.--WSP 984: 1933-36. WSP 1154: 1946(M), 1948(M). WSP 1448: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,694.32 ft (516.429 m) National Geodetic Vertical Datum of 1929 (Douglas County Road Department bench mark). Prior to July 19, 1949, nonrecording gage at same site and datum.

REMARKS.--Records good except those for period of backwater, July 21 to Sept. 30, which are fair. No regulation. Diversions for irrigation above station.

AVERAGE DISCHARGE.--50 years, (water years 1930-31, 1933-80), 110 ft³/s (3.115 m³/s), 19.15 in/yr (486 mm/yr), 79,700 acre-ft/yr (98.3 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,600 ft³/s (300 m³/s) Jan. 15, 1974, gage height, 16.40 ft (4.999 m), from high-water mark in well; minimum recorded, 1.2 ft³/s (0.034 m³/s) Sept. 2, 1970, but may have been less during period of no gage-height record Sept. 4-30, 1970.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,300 ft³/s (36.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 12	1100	*3,030	85.8	*9.73	2.966	Mar. 14	0830	1,330	37.7	6.18	1.884

Minimum, 2.6 ft³/s (0.074 m³/s) Sept. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	57	67	462	94	155	122	80	54	26	13	6.9
2	6.0	49	181	302	93	141	111	74	59	25	13	6.0
3	6.0	48	633	236	148	150	107	72	68	24	10	6.4
4	5.3	47	350	205	122	165	105	68	74	24	12	6.0
5	5.0	73	337	246	108	148	141	64	68	24	12	5.6
6	5.6	73	212	240	104	146	207	62	63	25	14	5.0
7	5.6	58	161	199	95	129	207	60	59	23	14	4.7
8	6.0	49	129	171	93	117	218	59	55	22	14	4.7
9	6.0	42	107	152	87	110	269	69	52	22	14	4.7
10	5.6	38	101	152	82	104	248	79	49	22	13	3.8
11	5.3	35	86	144	81	110	210	89	48	21	12	3.8
12	5.6	31	77	1650	77	104	187	77	48	21	12	3.8
13	6.9	30	71	2120	75	146	177	72	50	19	14	5.3
14	14	28	65	1770	73	813	171	69	47	19	13	6.9
15	32	27	61	1100	69	398	153	66	44	20	13	6.4
16	17	32	57	813	68	282	136	62	41	21	12	5.6
17	13	51	54	781	76	258	122	60	42	21	11	5.3
18	17	69	52	519	254	275	113	57	38	21	11	6.4
19	74	75	65	386	293	242	105	55	36	19	13	9.5
20	108	62	77	309	275	232	137	52	35	17	12	8.4
21	99	52	309	256	212	218	224	50	33	16	9.5	10
22	48	108	220	224	258	196	192	51	33	14	8.4	8.9
23	64	248	222	196	262	181	163	56	35	13	8.4	8.4
24	65	345	330	175	207	167	143	62	33	17	8.4	8.4
25	451	240	209	157	181	155	125	75	32	15	7.9	7.9
26	127	167	152	143	167	148	116	84	31	16	7.9	6.9
27	72	121	125	129	163	143	107	74	30	15	7.9	6.9
28	58	95	108	116	212	127	98	66	28	13	7.4	6.9
29	49	82	99	98	177	117	90	61	27	12	7.4	6.9
30	55	72	124	95	---	113	85	57	26	12	7.4	6.4
31	63	---	680	90	---	119	---	55	---	13	6.4	---
TOTAL	1500.9	2504	5521	13636	4206	5909	4589	2037	1338	592	339.0	192.8
MEAN	48.4	83.5	178	440	145	191	153	65.7	44.6	19.1	10.9	6.43
MAX	451	345	680	2120	293	813	269	89	74	26	14	10
MIN	5.0	27	52	90	68	104	85	50	26	12	6.4	3.8
CFSM	.62	1.07	2.28	5.64	1.86	2.45	1.96	.84	.57	.25	.14	.08
IN.	.72	1.19	2.63	6.50	2.01	2.82	2.19	.97	.64	.28	.16	.09
AC-FT	2980	4970	10950	27050	8340	11720	9100	4040	2650	1170	672	382

CAL YR 1979	TOTAL	36258.8	MEAN	99.3	MAX 1130	MIN 5.0	CFSM 1.27	IN 17.29	AC-FT	71920
WTR YR 1980	TOTAL	42364.7	MEAN	116	MAX 2120	MIN 3.8	CFSM 1.49	IN 20.20	AC-FT	84030

14309500 WEST FORK COW CREEK NEAR GLENDALE, OR

LOCATION.--Lat 42°48'15", long 123°36'35", in SW¼NE¼ sec.11, T.32 S., R.8 W., Douglas County, Hydrologic Unit 17100302, on left bank 1.6 mi (2.6 km) downstream from Bear Creek, 11 mi (18 km) northwest of Glendale, and at mile 0.8 (1.3 km).

DRAINAGE AREA.--86.9 mi^2 (225.1 km^2).

PERIOD OF RECORD.--August 1955 to current year.

REVISED RECORDS.--WSP 1738: 1956, drainage area (former site). WSP 1935: 1956.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,018.48 ft (310.433 m) National Geodetic Vertical Datum of 1929. Prior to June 8, 1964, at site 0.6 mi (1.0 km) upstream at different datum.

REMARKS.--Records good. No regulation or diversion above station.

AVERAGE DISCHARGE.--25 years, 271 ft^3/s (7.675 m^3/s), 42.35 in/yr (1,076 mm/yr), 196,300 acre-ft/yr (242 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,700 ft^3/s (445 m^3/s) Dec. 22, 1964, gage height, 18.59 ft (5.666 m), from floodmark, from rating curve extended above 2,600 ft^3/s (73.6 m^3/s) on basis of slope-area measurement of peak flow; minimum, 3.7 ft^3/s (0.11 m^3/s) Aug. 17, 19, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,500 ft^3/s (70.8 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 3	0100	2,590	73.3	7.67	2.338	Jan. 12	1100	*4,130	117	*9.19	2.801
Dec. 31	0300	2,540	71.9	7.62	2.323	Mar. 14	0400	3,930	111	9.00	2.743

Minimum, 7.0 ft^3/s (0.20 m^3/s) Sept. 10-13, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	123	170	1200	117	349	277	127	52	27	12	8.3
2	9.0	101	630	786	119	295	256	117	53	26	12	8.3
3	9.0	87	1650	578	149	250	234	110	57	25	12	8.6
4	8.6	92	737	449	138	213	225	104	58	25	12	8.6
5	8.6	216	619	528	129	194	290	96	56	25	11	8.3
6	8.3	188	449	519	127	180	390	92	51	25	12	8.0
7	8.3	138	333	425	117	163	600	86	50	24	12	7.6
8	8.6	108	256	345	113	147	666	83	47	23	11	8.0
9	8.6	86	205	302	112	136	600	96	44	22	11	8.0
10	8.6	72	180	298	104	127	880	96	43	23	11	7.6
11	8.6	63	151	341	101	140	674	84	42	22	11	7.0
12	8.6	56	134	3020	97	156	500	78	43	21	10	7.0
13	8.6	51	121	3390	92	619	397	75	44	21	9.7	7.3
14	9.7	47	110	2640	91	2580	375	71	44	21	9.7	8.3
15	11	44	101	1660	86	1090	333	68	40	19	9.7	8.6
16	11	67	94	1260	81	720	287	66	37	19	9.7	8.3
17	9.7	136	87	1160	99	668	247	62	36	18	9.7	7.6
18	11	280	89	774	548	824	216	58	34	18	9.7	7.6
19	77	353	474	568	761	749	194	57	33	17	10	9.0
20	225	256	573	439	548	652	210	55	32	17	10	9.3
21	161	183	1630	349	402	641	454	53	31	16	9.7	9.3
22	74	749	1300	291	737	578	484	53	31	15	9.3	9.0
23	74	1080	899	250	963	505	375	57	32	15	9.0	8.6
24	202	1430	1030	219	578	420	306	74	31	16	9.0	8.3
25	1090	761	702	196	449	349	253	96	34	15	9.0	8.0
26	298	524	489	180	543	302	216	92	33	14	9.0	7.6
27	165	392	379	163	495	280	188	81	30	13	8.6	7.3
28	125	295	306	149	489	243	168	70	29	13	8.6	7.3
29	104	234	260	130	420	219	149	64	28	12	8.6	7.3
30	117	199	941	120	---	202	136	59	27	12	8.6	7.3
31	142	---	1960	121	---	216	---	56	---	12	8.0	---
TOTAL	3018.8	8411	17059	22850	8805	14207	10580	2436	1202	591	312.6	241.3
MEAN	97.4	280	550	737	304	458	353	78.6	40.1	19.1	10.1	8.04
MAX	1090	1430	1960	3390	963	2580	880	127	58	27	12	9.3
MIN	8.3	44	87	120	81	127	136	53	27	12	8.0	7.0
CFSM	1.12	3.22	6.33	8.48	3.50	5.27	4.06	.90	.46	.22	.12	.09
IN.	1.29	3.60	7.30	9.78	3.77	6.08	4.53	1.04	.51	.25	.13	.10
AC-FT	5990	16680	33840	45320	17460	28180	20990	4830	2380	1170	620	479

CAL YR 1979	TOTAL	83769.5	MEAN 230	MAX 2340	MIN 7.3	CFSM 2.65	IN 35.86	AC-FT	166200	
WTR YR 1980	TOTAL	89713.7	MEAN 245	MAX 3390	MIN 7.0	CFSM 2.82	IN 38.40	AC-FT	177900	

14310000 COW CREEK NEAR RIDDLE, OR

LOCATION.--Lat 42°55'25", long 123°25'40", in NE¼ sec.32, T.30 S., R.6 W., Douglas County, Hydrologic Unit 17100302, on left bank 0.4 mi (0.6 km) upstream from Council Creek, 3.8 mi (6.1 km) southwest of Riddle, and at mile 6.7 (10.8 km).

DRAINAGE AREA.--456 mi^2 (1,181 km^2).

PERIOD OF RECORD.--September 1954 to current year.

REVISED RECORDS.--WSP 1935: 1956(M).

GAGE.--Water-stage recorder. Datum of gage is 682.60 ft (208.056 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records excellent. No regulation. Many small diversions for irrigation above station.

AVERAGE DISCHARGE.--26 years, 883 ft^3/s (25.01 m^3/s), 639,700 acre-ft/yr (789 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,400 ft^3/s (1,090 m^3/s) Jan. 15, 1974, gage height, 28.17 ft (8.586 m); minimum, 7.4 ft^3/s (0.21 m^3/s) Aug. 17-19, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 29, 1950, reached a stage of about 28.5 ft (8.69 m), present site and datum, from slope-area measurement, discharge, 41,100 ft^3/s (1,160 m^3/s).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 10,000 ft^3/s (283 m^3/s) and maximum discharge, 12,500 ft^3/s (354 m^3/s) Jan. 13, gage height, 13.23 ft (4.033 m); minimum, 22 ft^3/s (0.62 m^3/s) Sept. 11-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	381	600	5100	512	1270	826	526	217	107	38	24
2	29	317	989	3160	492	1130	760	492	213	100	37	24
3	28	274	5140	2230	606	1010	711	459	229	95	36	25
4	28	255	2720	1740	644	960	690	434	246	95	35	26
5	28	398	2560	1790	577	864	841	404	242	95	35	25
6	26	499	1840	1950	562	826	1700	381	237	95	35	24
7	27	404	1360	1670	512	753	2190	359	221	91	36	25
8	29	317	1060	1380	485	690	1900	343	209	86	33	24
9	29	255	849	1180	472	638	2460	364	193	82	33	25
10	27	213	732	1210	446	600	2590	404	186	82	33	25
11	28	190	631	1080	422	606	2000	392	179	80	32	23
12	27	165	548	7850	410	631	1570	381	179	76	31	22
13	29	149	485	11200	392	1020	1300	353	197	74	29	23
14	36	137	446	10800	386	7230	1180	337	201	72	28	24
15	53	128	410	7890	375	4340	1060	327	186	70	27	27
16	53	152	381	4870	359	2860	927	312	172	68	27	28
17	53	327	359	4710	375	2380	834	293	162	63	27	26
18	51	690	343	3490	1460	2530	753	274	159	61	28	25
19	102	1140	826	2560	2950	2310	690	260	149	59	29	26
20	459	880	1330	1980	2290	2030	711	250	143	58	29	28
21	677	638	4460	1610	1800	1920	1610	237	137	56	28	29
22	343	1060	4200	1340	2260	1710	1880	237	131	53	26	30
23	288	3240	2920	1150	3620	1500	1530	250	131	47	26	30
24	332	3770	4450	1000	2340	1310	1240	274	131	48	25	30
25	2980	2640	3070	903	1730	1170	1030	307	134	47	26	29
26	1370	1870	1980	826	1630	1040	895	327	131	45	25	29
27	664	1370	1500	753	1470	967	789	327	123	44	25	27
28	440	1050	1220	684	1560	849	697	293	118	44	25	26
29	353	834	1030	619	1440	767	631	264	113	43	25	27
30	327	690	2110	555	---	718	570	246	110	40	26	27
31	410	---	6210	548	---	697	---	233	---	38	25	---
TOTAL	9357	24433	56759	87828	32577	47326	36565	10340	5179	2114	920	783
MEAN	302	814	1831	2833	1123	1527	1219	334	173	68.2	29.7	26.1
MAX	2980	3770	6210	11200	3620	7230	2590	526	246	107	38	30
MIN	26	128	343	548	359	600	570	233	110	38	25	22
AC-FT	18560	48460	112600	174200	64620	93870	72530	20510	10270	4190	1820	1550

CAL YR 1979 TOTAL 265476 MEAN 727 MAX 7040 MIN 25 AC-FT 526600
WTR YR 1980 TOTAL 314181 MEAN 858 MAX 11200 MIN 22 AC-FT 623200

14311000 NORTH MYRTLE CREEK NEAR MYRTLE CREEK, OR

LOCATION.--Lat 43°02'30", long 123°15'30", in SW¼ sec.14, T.29 S., R.5 W., Douglas County, Hydrologic Unit 17100302, on left bank 300 ft (91 m) downstream from Bilger Creek, 1.5 mi (2.4 km) northeast of town of Myrtle Creek, and at mile 2.2 (3.5 km).

DRAINAGE AREA.--54.2 mi^2 (140.4 km^2).

PERIOD OF RECORD.--October 1955 to current year.

REVISED RECORDS.--WSP 1738: 1957. WRD OR-79: 1978.

GAGE.--Water-stage recorder. Datum of gage is 642.81 ft (195.928 m) National Geodetic Vertical Datum of 1929 (levels by City Engineer of Myrtle Creek). Oct. 1, 1955, to Aug. 31, 1977, at site 340 ft (104 m) downstream on right bank. Oct. 1, 1955, to Sept. 30, 1975, at datum 1.63 ft (0.497 m) lower and Oct. 1, 1975, to Aug. 31, 1977, at datum 1.33 ft (0.405 m) lower.

REMARKS.--Records good. No regulation. Several diversions for irrigation above station.

AVERAGE DISCHARGE.--25 years, 73.1 ft^3/s (2.070 m^3/s), 52,960 acre-ft/yr (65.3 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,260 ft^3/s (92.3 m^3/s) Jan. 20, 1964, gage height, 10.51 ft (3.203 m), from rating curve extended above 1,800 ft^3/s (51.0 m^3/s); maximum gage height, 11.58 ft (3.530 m) Dec. 26, 1955 (backwater from debris); no flow at times in July 1973 and August 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,080 ft^3/s (30.6 m^3/s) Jan. 13, gage height, 5.31 ft (1.618 m), no peak above base of 1,100 ft^3/s (31.2 m^3/s); minimum, 1.0 ft^3/s (0.028 m^3/s) Sept. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	42	52	86	50	62	82	41	22	9.2	3.0	2.5
2	3.7	29	94	88	49	61	74	38	24	9.8	3.0	3.0
3	2.7	22	345	90	56	61	69	36	28	9.8	2.7	4.0
4	2.7	22	310	88	58	61	66	33	31	10	2.7	3.7
5	2.3	32	296	200	55	61	66	31	29	10	3.2	3.0
6	2.0	29	185	220	55	72	80	30	26	9.8	4.0	2.3
7	2.5	24	124	165	52	69	99	28	24	8.2	3.2	2.5
8	3.2	20	98	126	52	61	116	28	22	7.4	3.0	2.7
9	3.4	18	86	112	47	55	128	34	20	7.8	3.2	2.0
10	3.0	16	80	124	44	52	130	40	20	7.4	2.3	1.7
11	2.7	15	67	124	41	58	119	38	19	6.9	2.3	1.3
12	3.2	14	59	467	40	58	107	34	18	6.2	2.2	2.2
13	3.2	14	52	1000	38	78	94	31	20	6.2	2.5	5.5
14	6.9	13	49	804	38	373	84	30	20	5.2	2.0	6.2
15	8.7	12	44	533	36	324	71	28	18	5.8	3.0	4.9
16	6.9	15	40	403	33	256	62	26	17	5.5	2.7	3.7
17	5.8	33	36	358	34	206	56	24	17	4.9	2.2	3.0
18	8.7	109	32	275	42	200	50	22	15	4.9	2.2	3.7
19	29	151	40	193	47	165	45	21	14	4.3	3.0	5.8
20	31	96	38	144	50	146	58	20	14	3.7	2.5	5.5
21	30	62	170	112	49	122	151	19	13	3.4	2.3	5.8
22	16	74	240	96	103	103	141	20	12	3.0	1.8	5.2
23	20	158	185	94	151	94	114	22	14	3.7	1.7	4.3
24	19	246	148	74	116	92	99	26	14	4.3	1.8	4.3
25	58	203	112	69	96	90	86	33	14	3.7	2.3	4.0
26	32	214	94	67	80	88	76	34	13	3.2	2.5	3.7
27	23	155	82	67	74	84	66	31	12	2.7	2.7	3.7
28	22	110	71	52	78	74	58	26	11	2.3	3.0	3.7
29	24	86	62	42	69	71	52	24	11	2.7	3.2	3.2
30	26	64	69	44	---	66	45	24	9.8	2.7	3.2	2.7
31	45	---	88	49	---	69	---	22	---	3.4	2.7	---
TOTAL	449.6	2098	3448	6366	1733	3432	2544	894	541.8	178.1	82.1	109.8
MEAN	14.5	69.9	111	205	59.8	111	84.8	28.8	18.1	5.75	2.65	3.66
MAX	58	246	345	1000	151	373	151	41	31	10	4.0	6.2
MIN	2.0	12	32	42	33	52	45	19	9.8	2.3	1.7	1.3
AC-FT	892	4160	6840	12630	3440	6810	5050	1770	1070	353	163	218

CAL YR 1979 TOTAL 26605.9 MEAN 72.9 MAX 899 MIN 1.4 AC-FT 52770
WTR YR 1980 TOTAL 21876.4 MEAN 59.8 MAX 1000 MIN 1.3 AC-FT 43390

14311500 LOOKINGGLASS CREEK AT BROCKWAY, OR

LOCATION.--Lat 43°07'50", long 123°27'50", in SE¼SE¼ sec.13, T.28 S., R.7 W., Douglas County, Hydrologic Unit 17100302, on left bank 1.7 mi (2.7 km) northwest of Brockway and at mile 2.85 (4.59 km).

DRAINAGE AREA.--158 mi² (409 km²).

PERIOD OF RECORD.--October 1955 to current year.

REVISED RECORDS.--WSP 2135: Drainage area (former site).

GAGE.--Water-stage recorder. Altitude of gage is 540 ft (165 m), from topographic map. Prior to Oct. 5, 1967, water-stage recorder at site 2.3 mi (3.7 km) downstream at different datum.

REMARKS.--Records good. Some regulation by Ben Irving Reservoir 17 mi (27 km) upstream on Berry Creek, capacity, 11,200 acre-ft (13.8 hm³) since January 1980. Many diversions by pumping for irrigation above station.

AVERAGE DISCHARGE.--25 years, 279 ft³/s (7.901 m³/s), 202,100 acre-ft/yr (249 hm³/yr), adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 35,000 ft³/s (991 m³/s) Dec. 26, 1955, gage height, 24.93 ft (7.599 m), site and datum then in use, from rating curve extended above 7,200 ft³/s (204 m³/s) on basis of slope-area measurement of peak flow; maximum gage height, 25.28 ft (7.705 m) Dec. 23, 1964 (backwater from South Umpqua River, site and datum then in use); no flow at times each year.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,000 ft³/s (85.0 m³/s) and maximum discharge, 5,510 ft³/s (156 m³/s) Jan. 12, gage height, 11.08 ft (3.377 m); no flow Oct. 1-18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	83	145	1000	104	189	145	102	24	9.3	26	42
2	.00	61	661	735	108	174	127	96	23	8.5	25	42
3	.00	46	1630	580	123	161	116	84	22	8.1	25	42
4	.00	40	735	453	113	152	113	75	26	8.9	25	42
5	.00	70	768	941	105	136	131	69	25	11	23	41
6	.00	77	544	922	114	127	249	63	23	11	30	40
7	.00	61	381	661	102	116	498	59	22	10	55	41
8	.00	47	285	510	98	107	472	55	22	9.3	57	41
9	.00	39	228	411	94	96	754	61	20	9.7	56	41
10	.00	32	198	711	89	89	688	60	18	11	57	40
11	.00	28	185	580	86	100	514	56	17	10	56	44
12	.00	24	145	2540	82	122	368	52	17	10	56	86
13	.00	21	127	4500	79	267	283	48	20	9.7	44	27
14	.00	19	108	3360	76	2110	241	46	25	8.9	44	20
15	.00	18	114	2110	71	1490	204	44	23	8.9	44	19
16	.00	20	100	1680	67	1080	172	41	19	8.9	44	63
17	.00	33	87	1240	69	834	150	38	18	8.9	44	65
18	.00	100	75	912	228	865	133	36	17	8.5	44	67
19	2.0	436	102	643	443	670	119	33	14	10	44	119
20	24	241	145	491	340	584	157	31	15	15	43	187
21	45	163	860	384	280	544	617	29	15	15	42	183
22	28	220	1160	293	808	461	548	29	14	15	43	174
23	21	773	903	267	1040	365	388	32	14	13	42	62
24	22	1560	834	216	648	296	291	34	15	9.7	42	54
25	212	931	634	204	446	256	239	33	15	8.5	42	51
26	133	813	439	168	355	228	202	31	15	9.7	42	33
27	75	529	328	150	288	206	172	29	13	11	42	25
28	55	346	262	131	254	174	147	29	13	12	42	25
29	48	258	224	111	212	154	127	26	10	23	42	24
30	47	195	375	102	---	138	116	25	10	18	42	23
31	79	---	1350	101	---	136	---	24	---	37	42	---
TOTAL	791.00	7284	14132	27107	6922	12427	8481	1470	544	367.5	1305	1763
MEAN	25.5	243	456	874	239	401	283	47.4	18.1	11.9	42.1	58.8
MAX	212	1560	1630	4500	1040	2110	754	102	26	37	57	187
MIN	.00	18	75	101	67	89	113	24	10	8.1	23	19
AC-FT	1570	14450	28030	53770	13730	24650	16820	2920	1080	729	2590	3500

CAL YR 1979 TOTAL 76599.20 MEAN 210 MAX 2980 MIN .00 AC-FT 151900
WTR YR 1980 TOTAL 82593.50 MEAN 226 MAX 4500 MIN .00 AC-FT 163800

14312000 SOUTH UMPQUA RIVER NEAR BROCKWAY, OR

LOCATION.--Lat 43°08'00", long 123°23'50", in SW¼ sec.15, T.28 S., R.6 W., Douglas County, Hydrologic Unit 17100302, on right bank 10 ft (3 m) upstream from Winston Bridge on State Highway 99, 2.5 mi (4.0 km) northeast of Brockway, 4.2 mi (6.8 km) downstream from Lookingglass Creek, and at mile 132.8 (213.7 km).

DRAINAGE AREA.--1,670 mi² (4,325 km²).

PERIOD OF RECORD.--December 1905 to June 1912, October 1923 to September 1926, January 1942 to current year. Monthly discharge only for some periods, published in WSP 1318.

REVISED RECORDS.--WSP 1248: 1946(M), 1948(M), 1951. WSP 1448: Drainage area. WRD Oreg. 1972: 1965(M).

GAGE.--Water-stage recorder. Datum of gage is 462.52 ft (140.976 m) National Geodetic Vertical Datum of 1929 (State Highway Department bench mark). Prior to June 24, 1949, nonrecording gage at several sites within 400 ft (122 m) of present site at various datums. June 24, 1949, to Oct. 1, 1970, at datum 461.84 ft (140.769 m) National Geodetic Vertical Datum of 1929 (State Highway Department bench mark).

REMARKS.--Records good. No regulation. Many small diversions for irrigation above station.

AVERAGE DISCHARGE.--46 years (water years 1907-11, 1924-26, 1943-80), 2,873 ft³/s (81.36 m³/s), 23.36 in/yr (593 mm/yr), 2,081,000 acre-ft/yr (2.57 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 125,000 ft³/s (3,540 m³/s) Dec. 23, 1964, gage height, 34.28 ft (10.449 m); minimum, 16 ft³/s (0.45 m³/s) Aug. 23, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 21, 1927, reached a stage of about 31.2 ft (9.51 m), present site and datum, discharge (revised), 89,500 ft³/s (2,530 m³/s). Discharge for flood of February 1890, which reached a stage 1.9 ft (0.60 m) higher, according to local resident who lived nearby at time of both floods, has been found to be in error and should not be used.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 20,000 ft³/s (566 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 3	1130	20,700	586	13.98	4.261	Mar. 14	1800	20,100	569	13.81	4.209
Jan. 13	2100	*38,700	1,100	*18.92	5.767						

Minimum, 73 ft³/s (2.07 m³/s) Oct. 4, 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	2380	2210	10900	1630	3640	2400	1890	1000	394	137	112
2	82	1740	2760	7130	1580	3220	2280	1740	975	376	131	112
3	83	1360	15800	5280	1770	2890	2130	1640	1050	354	128	112
4	76	1170	9980	4290	2470	3080	2030	1560	1150	346	128	114
5	76	1790	9390	5340	2200	3010	2100	1490	1170	342	124	116
6	76	2230	6360	7800	2150	2890	3150	1410	1140	346	120	114
7	74	1750	4630	5960	2200	2650	4850	1320	1080	337	146	114
8	74	1390	3590	4740	2070	2390	4730	1240	1010	309	150	110
9	77	1150	2910	3920	1940	2150	5940	1240	909	294	153	110
10	77	975	2550	4250	1800	1980	7410	1500	840	286	153	106
11	77	840	2360	3660	1690	1920	6100	1650	782	279	150	104
12	77	746	2010	16900	1590	2040	4940	1720	752	272	144	112
13	77	679	1800	34800	1500	2290	4340	1610	770	262	133	110
14	81	625	1640	32700	1420	13700	4130	1510	788	255	120	90
15	98	577	1520	24300	1360	13200	3790	1420	764	238	116	92
16	130	577	1410	15800	1290	8890	3250	1330	706	229	114	110
17	153	752	1320	15200	1260	6740	2990	1230	668	219	116	135
18	133	1850	1230	11500	1900	6940	2840	1150	641	205	118	137
19	239	3560	1280	8210	4970	6450	2630	1080	599	199	124	170
20	1530	2870	2220	6160	5270	5660	2630	1030	572	199	120	235
21	2020	2200	6020	4970	4810	5470	5270	967	545	196	116	272
22	1420	1960	9340	4110	5120	4800	5610	938	519	183	114	290
23	952	6420	6190	3480	8230	4160	4630	982	514	167	110	219
24	1020	10000	7800	3030	6020	3660	3850	1030	550	153	108	175
25	3890	9600	6310	2750	4540	3270	3300	1260	535	148	110	153
26	3890	6530	4360	2470	3970	2980	2890	1720	519	146	110	135
27	1990	4780	3340	2290	3550	2890	2630	1620	509	144	110	124
28	1450	3550	2790	2050	3900	2670	2450	1430	466	144	108	118
29	1220	2870	2440	1850	4200	2430	2290	1270	435	135	106	112
30	1110	2500	2910	1650	---	2290	2060	1170	418	137	106	110
31	1330	---	9680	1690	---	2190	---	1080	---	137	108	---
TOTAL	23668	79421	138150	259180	86400	132540	109640	42227	22376	7431	3831	4123
MEAN	763	2647	4456	8361	2979	4275	3655	1362	746	240	124	137
MAX	3890	10000	15800	34800	8230	13700	7410	1890	1170	394	153	290
MIN	74	577	1230	1650	1260	1920	2030	938	418	135	106	90
CFSM	.46	1.59	2.67	5.01	1.78	2.56	2.19	.82	.45	.14	.07	.08
IN.	.53	1.77	3.08	5.77	1.92	2.95	2.44	.94	.50	.17	.09	.09
AC-FT	46950	157500	274000	514100	171400	262900	217500	83760	44380	14740	7600	8180

CAL YR 1979	TOTAL 932601	MEAN 2555	MAX 21400	MIN 74	CFSM 1.53	IN 20.77	AC-FT 1850000
WTR YR 1980	TOTAL 908987	MEAN 2484	MAX 34800	MIN 74	CFSM 1.49	IN 20.25	AC-FT 1803000

14312260 SOUTH UMPQUA RIVER NEAR ROSEBURG, OR

LOCATION.--Lat 43°13'20", long 123°24'45", in NW¼SE¼ sec.16, T.27 S., R.6 W., Douglas County, Hydrologic Unit 17100302, on left bank, 3.7 mi (6.0 km) west of Roseburg, and at mile 117.7 (189.4 km).

DRAINAGE AREA.--1,798 mi² (4,657 km²).

PERIOD OF RECORD.--Water years 1970 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1970 to current year.
pH: August 1971 to current year.
DISSOLVED OXYGEN: October 1970 to current year.
WATER TEMPERATURES: October 1970 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1970.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 423 micromhos Sept. 18, 1971; minimum, 41 micromhos Mar. 2, 3, 1972.
pH: Maximum, 10.0 units Sept. 8, 9, 1971; minimum, 5.0 units Sept. 29, 1971.
DISSOLVED OXYGEN: Maximum, 16.0 mg/l July 30, 1977; minimum, 0.4 mg/l Aug. 10, 1978.
WATER TEMPERATURES: Maximum, 35.0°C July 16, 1976; minimum, 0.0°C Dec. 14, 16, 1972, Jan. 9, 1974.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 224 micromhos Oct. 9-12; minimum, 73 micromhos Nov. 25.
pH: Maximum, 9.3 units Aug. 20-22; minimum, 6.8 units Sept. 3, 4, 13, 14.
DISSOLVED OXYGEN: Maximum, 13.8 mg/l Aug. 21; minimum, 3.2 mg/l Oct. 15.
WATER TEMPERATURES: Maximum, 27.5°C July 28; minimum, 0.5°C Jan. 30, 31.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	PH (UNITS)	OXYGEN, DIS-SOLVED (MG/L)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	ALKA-LINITY FIELD (MG/L AS CACO3)
OCT											
22...	1100	1150	12.0	7.4	10.3	136	580	540	14	4.8	27
NOV											
13...	1130	730	10.5	7.6	11.2	125	39	K13	15	5.9	--
DEC											
18...	1000	1270	6.0	7.4	11.6	120	89	42	10	4.8	--
JAN											
15...	1000	32000	8.3	7.2	11.5	66	K200	128	5.3	2.6	--
FEB											
11...	1030	1500	6.4	7.3	11.0	133	570	100	9.0	5.2	--
APR											
14...	1700	4500	10.8	7.5	11.9	93	600	188	8.0	3.9	--
MAY											
13...	1700	1700	12.2	7.5	10.7	110	52	23	10	4.2	--
JUN											
16...	1600	765	18.8	8.0	10.0	130	550	53	8.0	4.4	--
JUL											
22...	1100	227	26.0	7.9	9.0	163	260	1000	14	6.4	--
AUG											
12...	1000	147	23.0	7.9	5.8	142	190	1680	12	6.3	--
SEP											
16...	1200	100	19.0	8.0	9.9	168	52	340	13	6.9	--
16...	1500	100	20.2	8.7	12.4	169	--	--	13	6.8	--
16...	1800	100	20.9	8.7	12.1	170	--	--	12	6.7	--
16...	2000	100	20.8	8.6	10.2	170	--	--	12	6.7	--
17...	0630	120	18.1	7.6	6.7	165	--	--	13	6.8	--
17...	0900	115	16.2	7.9	7.8	162	--	--	13	6.8	--

14312260 SOUTH UMPQUA RIVER NEAR ROSEBURG, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)
OCT											
22...	--	--	--	.05	--	--	--	.080	55	28	93
NOV											
13...	6.1	--	--	.08	.38	.060	.52	.120	62	--	89
DEC											
18...	5.1	--	--	.24	.29	.000	.53	.010	45	--	80
JAN											
15...	1.9	--	--	.13	.79	.060	.98	.080	24	--	52
FEB											
11...	4.3	--	--	.19	.38	.000	.57	.040	44	--	78
APR											
14...	2.2	--	--	.04	.64	.040	.72	.060	36	--	73
MAY											
13...	3.3	--	--	.04	.47	.030	.54	.040	42	--	68
JUN											
16...	4.8	--	--	.00	.25	.120	.37	.030	38	--	78
JUL											
22...	19	--	--	.08	2.7	.160	3.0	.190	61	--	91
AUG											
12...	12	--	--	.16	.74	.250	1.2	.250	56	--	97
SEP											
16...	13	.070	.13	.18	.65	.450	1.3	.350	61	--	97
16...	13	.080	.12	.20	.43	.400	1.0	.410	60	--	--
16...	15	.080	.14	.22	.57	.430	1.2	.420	58	--	--
16...	14	.080	.15	.31	.48	.470	1.3	.420	58	--	--
17...	15	.070	.10	.17	1.0	.480	1.7	.380	60	--	95
17...	14	.060	.09	.14	.52	.360	1.0	.320	60	--	93

DATE	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM DISSOLVED (UG/L AS CD)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	NICKEL, DISSOLVED (UG/L AS NI)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, DISSOLVED (UG/L AS ZN)	ALUMINUM, DISSOLVED (UG/L AS AL)	MERCURY DISSOLVED (UG/L AS HG)
JAN												
15...	0	10	<1	<3	1	60	2	3	0	4	50	1.2
AUG												
12...	1	20	<1	<3	3	30	3	2	0	6	50	.0

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	ALDRIN, TOTAL (UG/L)	LINDANE TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DIELDRIN TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)
OCT								
22...	.00	.00	.0	.00	.00	.00	.00	.00
JAN								
15...	.00	.00	.0	.00	.00	.00	.00	.00
APR								
14...	--	--	--	--	--	--	--	--
MAY								
13...	.00	.00	.0	.00	.00	.00	.00	.00
AUG								
12...	.00	.00	.0	.00	.00	.00	.00	.00

DATE	TOXAPHENE, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	METHOXYCHLOR, TOTAL (UG/L)	PCB TOTAL (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
OCT								
22...	0	.00	.00	.00	.00	--	--	--
JAN								
15...	0	.00	.00	.00	.00	.00	.00	.00
APR								
14...	--	--	--	--	--	.00	.00	.00
MAY								
13...	0	.00	.00	.00	.00	--	--	--
AUG								
12...	0	.00	.00	.00	.00	.00	.00	.00

14312260 SOUTH UMPQUA RIVER NEAR ROSEBURG, OR--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	215	131	104	78	109	107	118	113	115	142	180	172
2	217	111	---	83	113	109	116	115	117	143	181	172
3	217	109	---	90	118	112	116	116	119	144	181	172
4	218	115	---	96	114	115	118	117	120	145	182	170
5	218	121	---	102	105	113	120	117	118	147	183	171
6	220	111	88	92	105	113	120	118	116	148	181	170
7	220	100	94	90	104	114	108	118	116	149	180	169
8	220	104	98	94	104	116	104	118	116	151	180	170
9	221	109	102	96	107	118	103	121	118	154	179	174
10	220	113	106	98	108	121	93	122	120	156	178	174
11	221	116	108	96	111	124	93	118	121	157	179	172
12	220	121	109	---	113	126	97	112	123	158	178	174
13	219	123	111	---	114	128	101	109	127	158	174	173
14	219	128	112	---	119	108	104	108	129	159	172	171
15	218	131	114	---	123	94	105	110	129	---	171	173
16	218	135	116	82	124	101	105	110	130	---	171	177
17	217	142	118	81	128	105	108	111	129	---	171	174
18	216	144	121	83	131	105	108	113	129	---	170	171
19	215	127	125	87	114	101	108	115	130	---	171	165
20	207	108	124	90	95	104	112	115	132	---	173	175
21	180	106	110	95	94	104	118	118	133	---	174	174
22	137	110	86	98	104	104	105	121	134	---	174	166
23	124	106	88	101	99	107	104	124	135	173	174	152
24	124	91	89	107	99	109	107	123	140	172	174	152
25	130	77	86	111	105	111	109	122	139	173	174	157
26	117	86	93	113	109	113	111	118	140	175	175	160
27	112	91	99	114	111	114	113	110	139	174	176	162
28	114	95	103	114	113	114	114	106	140	175	174	171
29	120	99	107	114	108	114	113	107	140	177	174	178
30	125	102	112	110	---	116	114	110	141	178	173	184
31	130	---	93	106	---	117	---	113	---	180	173	---
MEAN	186	112	104	97	110	112	109	115	128	160	176	170

14312260 SOUTH UMPQUA RIVER NEAR ROSEBURG, OR--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	9.0	7.1	7.4	7.3	7.3	7.3	7.1	7.0	7.3	7.3	7.2	7.1
2	9.1	7.1	7.3	7.3	---	---	7.2	7.1	7.3	7.3	7.2	7.1
3	9.1	7.1	7.4	7.3	---	---	7.2	7.1	7.3	7.3	7.2	7.1
4	9.0	7.1	7.4	7.3	---	---	7.2	7.1	7.3	7.3	7.2	7.2
5	9.1	7.1	7.5	7.3	---	---	7.2	7.0	7.3	7.2	7.2	7.2
6	8.4	7.1	7.4	7.3	7.3	7.2	7.2	7.1	7.3	7.2	7.2	7.2
7	8.9	7.0	7.4	7.3	7.2	7.2	7.2	7.1	7.3	7.2	7.3	7.2
8	8.7	7.1	7.5	7.3	7.3	7.2	7.2	7.1	7.3	7.2	7.3	7.2
9	8.8	7.0	7.5	7.4	7.3	7.2	7.2	7.1	7.3	7.3	7.3	7.2
10	8.9	7.1	7.6	7.4	7.3	7.3	7.2	7.2	7.3	7.3	7.3	7.2
11	8.8	7.1	7.7	7.5	7.4	7.3	7.2	7.2	7.3	7.3	7.4	7.3
12	8.5	7.1	7.7	7.5	7.4	7.3	---	---	7.4	7.3	7.4	7.3
13	8.7	7.0	7.6	7.5	7.4	7.3	---	---	7.4	7.3	7.3	7.2
14	7.7	7.0	7.7	7.4	7.4	7.4	---	---	7.4	7.3	7.2	6.9
15	8.1	6.9	7.7	7.4	7.5	7.4	---	---	7.4	7.4	6.9	6.9
16	8.0	7.0	7.5	7.3	7.5	7.4	6.9	6.9	7.4	7.4	6.9	6.9
17	8.1	7.1	7.5	7.3	7.5	7.4	6.9	6.9	7.4	7.4	7.0	6.9
18	7.8	7.2	7.5	7.4	7.4	7.4	6.9	6.9	7.5	7.4	7.0	7.0
19	7.8	7.2	7.4	7.3	7.5	7.4	7.0	6.9	7.4	7.1	7.0	7.0
20	7.5	7.2	7.4	7.3	7.5	7.3	7.0	7.0	7.2	7.1	7.0	7.0
21	7.5	7.4	7.4	7.3	7.4	7.2	7.0	7.0	7.2	7.1	7.0	7.0
22	7.4	7.3	7.3	7.2	7.2	7.1	7.1	7.0	7.2	7.1	7.0	7.0
23	7.4	7.3	7.3	7.1	7.2	7.2	7.1	7.1	7.1	7.0	7.0	7.0
24	7.4	7.3	7.2	7.1	7.3	7.2	7.1	7.1	7.1	7.0	7.1	7.0
25	7.4	7.2	7.1	7.1	7.2	7.2	7.1	7.1	7.1	7.1	7.1	7.1
26	7.2	7.0	7.2	7.2	7.2	7.2	7.2	7.1	7.2	7.1	7.2	7.1
27	7.1	7.0	7.2	7.2	7.3	7.2	7.2	7.2	7.2	7.1	7.2	7.1
28	7.2	7.1	7.3	7.2	7.3	7.2	7.3	7.2	7.2	7.2	7.2	7.1
29	7.3	7.2	7.3	7.2	7.3	7.3	7.3	7.2	7.1	7.1	7.2	7.1
30	7.4	7.3	7.3	7.2	7.3	7.1	7.3	7.3	---	---	7.3	7.2
31	7.4	7.3	---	---	7.3	7.0	7.3	7.3	---	---	7.2	7.2
MONTH	9.1	6.9	7.7	7.1	7.5	7.0	7.3	6.9	7.5	7.0	7.4	6.9

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.3	7.2	7.4	7.1	7.7	7.3	8.4	7.3	8.9	7.2	8.9	6.9
2	7.3	7.2	7.4	7.2	7.6	7.3	8.4	7.2	8.8	7.2	8.2	6.9
3	7.3	7.2	7.5	7.2	7.7	7.3	8.3	7.2	8.9	7.2	8.6	6.8
4	7.3	7.2	7.6	7.2	7.6	7.3	8.2	7.2	8.9	7.3	8.8	6.8
5	7.3	7.2	7.6	7.3	7.6	7.3	8.3	7.2	8.7	7.1	8.8	6.9
6	7.3	7.2	7.6	7.3	7.6	7.3	8.3	7.2	8.9	7.2	8.8	6.9
7	7.2	7.1	7.7	7.3	7.6	7.3	8.4	7.2	8.9	7.2	8.8	6.9
8	7.1	7.1	7.7	7.3	7.7	7.3	8.4	7.2	8.9	7.2	8.9	6.9
9	7.2	7.1	7.7	7.3	7.6	7.3	8.2	7.2	9.0	7.2	8.9	6.9
10	7.1	7.1	7.6	7.4	7.7	7.3	8.2	7.2	9.0	7.3	8.9	6.9
11	7.1	7.0	7.6	7.3	7.7	7.3	8.3	7.2	9.0	7.3	9.0	6.9
12	7.1	7.0	7.6	7.3	7.7	7.3	8.3	7.2	9.0	7.3	8.3	6.9
13	7.1	7.0	7.5	7.4	7.6	7.3	8.4	7.2	8.9	7.2	7.7	6.8
14	7.1	6.9	7.7	7.3	7.7	7.3	8.4	7.2	9.0	7.1	8.8	6.8
15	7.0	6.9	7.7	7.4	7.7	7.3	---	---	9.1	7.2	8.8	6.9
16	7.0	6.9	7.8	7.4	7.6	7.3	---	---	9.1	7.3	8.9	6.9
17	7.0	6.9	7.9	7.4	7.9	7.3	---	---	9.2	7.4	8.7	7.0
18	7.1	6.9	7.9	7.4	8.0	7.4	---	---	9.1	7.5	8.1	7.1
19	7.1	6.9	8.0	7.4	8.1	7.4	---	---	9.2	7.5	8.4	6.9
20	7.0	7.0	8.0	7.4	8.1	7.4	---	---	9.3	7.5	8.2	7.0
21	7.0	6.9	7.7	7.3	8.2	7.3	---	---	9.3	7.6	8.3	7.1
22	7.0	7.0	7.7	7.3	8.1	7.3	---	---	9.3	7.3	8.4	7.1
23	7.1	7.0	7.8	7.3	7.8	7.2	8.3	7.1	9.2	7.2	8.4	7.1
24	7.1	7.0	7.7	7.4	7.9	7.2	8.6	7.1	8.7	7.0	8.4	7.0
25	7.2	7.1	7.7	7.3	8.0	7.2	8.7	7.1	9.1	7.0	8.5	7.0
26	7.3	7.1	7.7	7.4	8.1	7.3	8.7	7.1	9.1	7.0	8.5	7.0
27	7.3	7.1	7.5	7.3	8.2	7.3	8.8	7.1	9.0	6.9	7.9	7.0
28	7.3	7.1	7.5	7.2	8.3	7.3	8.7	7.1	8.9	6.9	8.5	6.9
29	7.4	7.1	7.5	7.2	8.3	7.3	8.8	7.1	8.9	6.9	8.5	7.0
30	7.4	7.1	7.5	7.2	8.4	7.3	8.8	7.2	8.8	6.9	8.3	6.9
31	---	---	7.6	7.3	---	---	8.8	7.1	8.8	6.9	---	---
MONTH	7.4	6.9	8.0	7.1	8.4	7.2	8.8	7.1	9.3	6.9	9.0	6.8

14312260 SOUTH UMPQUA RIVER NEAR ROSEBURG, OR--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	13.6	4.8	8.7	10.4	10.1	10.2	12.3	11.8	12.2	11.7	11.6	11.7
2	13.2	4.9	8.9	10.6	10.3	10.4	---	---	---	11.8	11.7	11.8
3	13.5	5.0	9.1	10.5	10.3	10.4	---	---	---	11.9	11.8	11.9
4	12.8	4.9	8.8	10.7	10.3	10.4	---	---	---	11.9	11.6	11.8
5	13.6	5.1	9.4	10.9	10.4	10.6	---	---	---	11.7	11.6	11.6
6	10.7	5.0	7.1	11.0	10.6	10.8	---	---	---	12.0	11.7	11.9
7	12.5	4.6	7.8	11.0	10.7	10.8	---	---	---	12.1	12.0	12.1
8	11.6	4.8	7.6	11.1	10.7	10.9	---	---	---	12.2	12.0	12.1
9	11.8	4.5	7.8	11.4	11.0	11.2	12.0	11.9	11.9	12.0	11.8	11.9
10	12.6	4.9	8.8	11.8	11.2	11.4	12.1	11.8	11.9	12.3	11.8	12.1
11	12.5	5.2	8.8	11.9	11.2	11.5	12.3	11.9	12.1	12.3	12.2	12.3
12	10.9	5.2	7.4	12.1	11.3	11.6	12.5	12.2	12.3	---	---	---
13	11.5	3.8	7.4	12.0	11.4	11.6	12.7	12.2	12.5	---	---	---
14	7.6	3.6	5.4	12.1	11.4	11.2	12.7	12.5	12.5	---	---	---
15	10.0	3.2	6.3	12.2	11.4	11.6	12.6	12.4	12.5	---	---	---
16	9.7	4.2	6.8	11.8	11.0	11.1	12.5	12.3	12.4	10.5	10.4	10.4
17	10.0	5.3	7.5	12.0	11.1	11.4	12.3	11.9	12.2	10.6	10.4	10.4
18	9.2	6.2	7.4	11.9	11.4	11.6	11.9	11.6	11.7	11.0	10.6	10.8
19	9.4	6.0	7.6	12.0	11.1	11.5	11.6	11.2	11.4	11.4	11.0	11.2
20	9.0	6.8	8.0	12.2	12.0	12.1	11.2	10.9	11.2	11.7	11.4	11.6
21	9.9	9.0	9.6	12.5	12.2	12.4	11.0	10.8	10.9	11.6	11.5	11.5
22	9.9	9.7	9.8	12.3	11.9	12.1	11.3	11.0	11.3	11.6	11.5	11.5
23	10.1	9.5	9.8	12.2	11.9	12.0	11.4	11.3	11.4	11.6	11.5	11.5
24	9.8	9.2	9.5	11.9	11.7	11.7	11.5	11.4	11.4	11.5	11.3	11.4
25	9.5	9.1	9.3	12.0	11.8	11.8	11.7	11.5	11.6	11.3	11.2	11.3
26	9.8	9.5	9.7	12.3	12.0	12.2	11.9	11.7	11.9	11.4	11.2	11.3
27	10.0	9.8	9.9	12.6	12.3	12.5	12.1	11.9	12.0	11.9	11.4	11.7
28	10.2	9.8	10.0	12.7	12.6	12.7	12.3	12.1	12.2	12.2	11.9	12.1
29	10.5	10.1	10.2	12.8	12.6	12.7	12.6	12.2	12.4	12.6	12.2	12.4
30	10.5	10.1	10.3	12.6	12.3	12.5	12.2	11.7	12.0	12.9	12.6	12.8
31	10.4	10.1	10.2	---	---	---	12.0	11.7	11.8	12.9	12.7	12.8
MONTH	13.6	3.2	8.6	12.8	10.1	11.5	12.7	10.8	11.9	12.9	10.4	11.7

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	12.8	12.3	12.6	10.6	10.5	10.6	12.2	11.5	11.8	11.1	10.1	10.6
2	12.3	11.7	12.0	10.8	10.5	10.6	12.3	11.7	12.0	10.8	9.9	10.3
3	11.8	11.3	11.6	10.6	10.4	10.5	12.2	11.6	11.8	11.0	10.0	10.5
4	11.5	11.2	11.3	10.6	10.3	10.5	12.1	11.5	11.8	10.9	9.7	10.2
5	11.4	11.3	11.4	10.5	10.3	10.4	12.0	11.5	11.7	10.5	9.5	10.0
6	11.6	11.4	11.5	10.6	10.3	10.4	11.8	11.4	11.6	10.5	9.4	9.9
7	11.6	11.4	11.5	10.7	10.4	10.5	12.1	11.5	11.8	10.5	9.4	10.0
8	11.5	11.2	11.4	10.8	10.4	10.6	12.1	11.9	12.0	10.8	9.2	9.9
9	11.5	11.3	11.4	10.9	10.4	10.7	12.0	11.9	12.0	10.7	9.6	10.1
10	11.7	11.4	11.5	10.9	10.4	10.7	12.0	11.8	11.9	10.8	9.8	10.2
11	11.7	11.5	11.6	10.8	10.3	10.6	12.1	11.8	11.9	10.9	10.0	10.5
12	11.6	11.4	11.5	11.0	10.5	10.7	12.0	11.5	11.8	11.2	10.3	10.7
13	11.5	11.2	11.4	10.8	10.6	10.7	11.5	11.2	11.4	11.0	10.3	10.6
14	11.5	10.7	11.2	10.8	10.6	10.8	11.5	11.1	11.3	11.0	10.1	10.5
15	10.9	10.7	10.8	11.1	10.8	11.0	11.6	11.1	11.4	10.8	9.9	10.4
16	10.9	10.7	10.8	11.3	11.0	11.2	11.5	10.8	11.2	10.8	9.5	10.2
17	11.0	10.6	10.9	11.1	11.0	11.0	11.3	10.8	11.0	10.6	9.1	9.9
18	10.8	10.4	10.7	11.3	11.1	11.2	11.4	10.7	11.1	10.4	8.9	9.6
19	10.8	10.5	10.7	11.2	10.9	11.1	11.4	10.6	10.8	11.0	8.9	9.8
20	10.8	10.6	10.8	11.0	10.8	10.9	11.1	10.6	10.8	10.8	8.5	9.6
21	10.9	10.8	10.9	11.3	10.9	11.1	11.5	10.6	11.1	9.9	8.3	9.0
22	11.0	10.7	10.8	11.4	11.2	11.3	11.7	11.5	11.6	10.6	8.3	9.5
23	11.2	11.0	11.1	11.4	11.1	11.3	11.7	11.3	11.6	10.9	9.0	10.0
24	11.1	10.7	11.0	11.2	11.0	11.1	11.3	10.9	11.2	11.0	9.4	10.2
25	10.7	10.6	10.6	11.2	11.0	11.1	11.2	10.8	11.0	11.0	9.7	10.4
26	10.6	10.5	10.6	11.2	11.0	11.1	11.3	10.6	10.9	11.3	10.3	10.8
27	10.5	10.3	10.4	11.5	11.0	11.3	11.1	10.1	10.6	11.1	10.3	10.6
28	10.5	10.3	10.4	11.8	11.3	11.5	10.8	10.0	10.3	10.9	10.0	10.4
29	10.6	10.4	10.5	11.8	11.3	11.5	11.0	9.9	10.5	10.8	9.8	10.2
30	---	---	---	12.0	11.4	11.6	11.2	10.3	10.7	10.7	9.7	10.2
31	---	---	---	11.7	11.3	11.5	---	---	---	10.8	9.6	10.1
MONTH	12.8	10.3	11.1	12.0	10.3	10.9	12.3	9.9	11.4	11.3	8.3	10.2

14312260 SOUTH UMPQUA RIVER NEAR ROSEBURG, OR--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	10.7	9.4	10.0	11.7	7.9	9.8	11.8	5.1	8.3	13.0	4.9	8.8
2	10.7	9.5	10.1	11.4	7.4	9.3	11.6	5.0	8.2	10.0	4.5	7.0
3	10.7	9.6	10.2	11.2	7.5	9.3	11.5	5.0	8.1	11.5	4.5	7.6
4	10.7	9.5	10.1	11.2	7.4	9.4	12.0	5.3	8.6	12.3	4.9	8.5
5	10.6	9.5	10.1	11.4	7.7	9.5	11.3	4.9	7.8	12.5	5.1	8.6
6	10.4	9.5	9.9	11.5	7.8	9.8	12.1	5.3	8.7	12.2	5.1	8.4
7	10.6	9.6	10.0	11.5	7.6	9.6	12.2	5.3	8.7	11.7	4.7	7.9
8	10.4	9.2	9.8	11.2	7.1	9.0	11.7	5.3	8.1	12.6	4.4	8.5
9	10.1	8.9	9.4	10.8	6.7	8.8	12.0	5.3	8.5	12.4	4.3	8.3
10	10.0	8.5	9.2	11.5	6.6	9.1	11.9	5.0	8.2	12.5	4.1	8.1
11	9.9	8.3	9.1	11.5	6.9	9.3	11.8	4.9	8.2	12.4	3.9	8.2
12	9.9	8.4	9.1	11.0	6.4	8.9	11.6	4.8	7.5	10.0	4.0	6.5
13	10.3	8.4	9.3	11.2	6.3	9.0	11.2	4.8	7.6	8.5	4.5	6.2
14	10.5	9.1	9.8	11.4	6.4	9.0	11.5	4.7	8.0	12.0	4.7	8.1
15	10.5	9.0	9.7	---	---	---	12.2	4.9	8.6	12.2	5.2	8.7
16	10.0	8.5	9.2	---	---	---	12.1	4.9	8.6	12.4	5.1	8.7
17	10.6	8.9	9.7	---	---	---	12.8	5.0	8.9	11.8	5.7	8.4
18	10.4	8.6	9.5	---	---	---	11.8	5.0	8.2	9.4	5.6	7.2
19	10.5	8.4	9.4	---	---	---	13.2	5.0	9.1	10.2	5.5	7.4
20	10.4	8.5	9.5	---	---	---	13.7	5.0	9.3	9.8	5.7	7.5
21	11.0	8.4	9.6	---	---	---	13.8	5.0	9.3	10.4	6.8	8.4
22	10.9	8.3	9.5	10.7	---	---	13.7	4.2	8.8	10.7	7.5	8.9
23	10.2	8.2	9.1	9.9	5.1	7.2	13.7	4.2	8.8	10.7	7.6	8.9
24	10.5	8.2	9.2	10.8	5.2	7.9	10.7	3.8	6.9	10.8	7.0	8.6
25	10.7	8.3	9.5	10.8	5.2	8.0	13.0	4.2	8.6	11.0	6.4	8.5
26	10.7	8.4	9.6	11.5	5.4	8.3	13.4	4.2	8.7	10.8	6.1	8.2
27	11.0	8.5	9.8	11.3	5.2	8.1	13.4	4.4	8.4	9.1	5.8	7.3
28	11.4	8.5	9.9	11.3	4.8	7.8	12.4	4.3	8.1	10.9	5.3	8.0
29	11.3	8.2	9.6	11.7	4.8	8.1	12.7	4.3	8.2	10.8	5.4	7.9
30	11.4	8.2	9.8	11.8	5.0	8.3	11.8	4.5	8.2	10.2	5.0	7.4
31	---	---	---	11.6	4.7	8.1	12.2	4.6	8.0	---	---	---
MONTH	11.4	8.2	9.6	11.8	4.7	8.8	13.8	3.8	8.4	13.0	3.9	8.0

14312260 SOUTH UMPQUA RIVER NEAR ROSEBURG, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	21.0	19.0	12.5	12.0	9.0	7.5	8.5	8.0	3.5	1.5	9.5	9.0
2	20.5	18.5	12.0	11.5	---	---	8.5	8.5	5.0	3.5	10.0	8.5
3	21.0	19.0	12.0	11.5	---	---	8.5	8.5	6.5	5.0	10.0	9.0
4	21.0	19.0	11.5	11.0	---	---	8.5	8.5	7.0	6.0	10.5	9.5
5	21.0	19.0	11.5	11.0	---	---	9.0	8.5	7.0	6.5	10.5	9.5
6	20.5	19.5	11.0	11.0	8.5	8.0	8.5	7.5	7.0	6.5	10.5	9.0
7	20.5	19.0	11.0	10.5	8.0	7.5	7.5	7.0	6.5	6.0	10.5	9.0
8	20.0	19.0	11.0	10.5	8.0	7.5	7.0	7.0	7.0	6.5	10.5	9.5
9	19.5	18.0	10.5	10.0	8.0	7.5	7.0	6.5	7.0	6.5	10.0	9.0
10	19.5	17.5	10.5	10.0	8.0	7.0	6.5	5.5	6.5	6.5	10.0	9.0
11	19.5	17.5	10.5	9.5	7.0	6.0	6.0	5.0	6.5	6.0	9.5	9.0
12	19.0	17.5	10.0	9.5	6.0	6.0	---	---	6.5	6.0	9.0	8.5
13	19.0	17.5	9.5	9.5	5.5	5.0	---	---	7.5	6.5	8.5	8.0
14	18.5	18.0	9.5	9.0	5.0	4.5	---	---	7.0	6.0	8.0	7.5
15	18.5	17.5	9.0	9.0	4.5	4.5	---	---	7.5	6.0	7.5	7.0
16	18.5	17.5	9.0	8.5	4.5	4.0	8.0	7.5	7.5	7.0	8.0	7.0
17	18.0	17.0	9.5	9.0	6.0	4.5	8.5	7.5	7.5	6.5	7.5	7.5
18	17.0	16.0	9.0	8.5	6.5	6.0	7.5	6.0	8.5	7.5	8.5	7.5
19	16.0	15.0	8.5	8.0	7.5	6.5	6.0	5.0	9.0	8.5	9.0	8.0
20	14.5	13.0	8.0	7.0	8.5	7.5	5.0	4.5	8.5	8.0	9.0	8.5
21	13.0	12.0	7.0	6.5	8.5	8.0	4.5	4.5	8.5	7.5	8.5	8.0
22	12.0	11.5	7.5	6.5	8.0	7.0	5.0	4.5	8.0	7.5	9.0	8.0
23	13.0	12.0	7.5	7.0	7.0	6.5	5.0	4.5	7.5	7.0	9.5	8.0
24	13.5	13.0	8.5	7.5	7.0	6.5	5.5	5.0	9.0	7.5	10.5	8.5
25	13.5	13.0	8.5	7.5	7.0	6.5	6.0	5.5	9.5	9.0	10.5	9.0
26	13.5	12.5	7.5	7.0	7.0	6.5	5.5	4.5	10.0	9.0	10.5	9.0
27	13.5	12.5	7.0	6.5	6.5	6.0	4.5	3.5	10.5	10.0	10.5	8.5
28	13.0	12.0	6.5	6.0	6.0	5.5	3.5	2.5	10.5	9.5	10.5	8.5
29	12.5	11.5	7.0	6.0	6.0	5.0	2.0	1.0	10.0	9.0	9.5	8.5
30	12.0	11.5	7.5	6.5	7.0	5.5	1.0	.5	---	---	9.5	8.5
31	12.5	12.0	---	---	8.0	7.0	1.5	.5	---	---	9.0	8.5
MONTH	21.0	11.5	12.5	6.0	9.0	4.0	9.0	.5	10.5	1.5	10.5	7.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.0	8.5	15.5	14.0	18.0	16.5	24.0	20.0	26.5	23.0	22.5	19.5
2	9.0	7.5	15.5	14.5	17.0	16.0	24.0	21.0	26.5	23.5	21.5	20.5
3	9.0	8.0	16.0	13.5	16.5	15.0	22.5	20.5	25.5	23.0	21.5	19.0
4	9.0	8.5	17.0	14.5	16.5	15.5	21.5	20.0	26.0	22.5	22.0	18.5
5	9.5	8.5	17.5	15.5	16.5	15.5	21.5	19.5	24.5	22.0	22.5	19.0
6	10.0	9.0	17.5	16.0	16.0	15.0	22.5	19.0	24.5	21.0	22.0	19.5
7	9.0	8.0	17.5	15.0	16.5	14.5	24.5	20.0	25.0	21.5	22.0	20.5
8	8.5	8.0	17.0	15.5	18.5	16.0	24.0	21.0	24.5	21.0	22.5	19.5
9	9.5	8.5	16.0	15.0	19.0	17.5	23.0	21.0	25.5	22.0	23.5	20.0
10	10.0	9.0	15.0	13.5	19.5	18.5	24.0	20.5	26.0	22.5	23.5	21.0
11	10.0	9.0	13.5	12.5	19.5	18.5	25.0	21.0	26.0	23.0	23.0	20.0
12	11.5	9.5	12.5	12.0	19.0	18.0	24.5	22.0	25.5	22.5	22.0	21.0
13	12.5	10.5	12.5	12.0	18.5	17.5	25.0	21.5	25.0	22.5	20.5	19.0
14	12.0	11.0	13.5	12.0	17.5	17.0	25.5	22.5	25.0	22.0	21.0	18.0
15	12.5	10.5	14.0	12.5	19.0	17.0	---	---	24.5	21.5	21.0	18.0
16	13.5	11.0	15.5	12.5	19.0	17.5	---	---	24.5	21.5	21.0	18.0
17	13.5	12.0	17.0	14.0	19.5	17.5	---	---	24.5	21.5	21.0	18.0
18	14.5	12.0	18.0	15.5	21.0	18.5	---	---	23.0	21.5	20.0	18.5
19	14.0	13.0	19.0	16.5	21.5	19.5	---	---	24.0	20.5	20.0	18.5
20	13.5	12.5	20.0	17.5	22.0	20.0	---	---	24.0	21.0	19.0	18.0
21	12.0	10.0	20.0	18.5	22.5	20.0	---	---	23.5	20.5	19.0	17.0
22	10.0	9.5	18.0	17.0	22.0	20.0	---	---	23.5	21.0	19.0	16.5
23	11.5	10.0	16.5	16.0	21.0	19.5	26.5	24.5	24.0	21.0	19.0	16.0
24	13.5	11.5	16.5	15.0	20.5	19.5	26.5	23.5	23.0	21.0	19.0	16.5
25	14.0	12.0	15.0	14.5	20.5	19.0	26.5	23.5	23.5	20.0	20.0	17.0
26	15.0	12.0	14.5	13.5	20.5	18.5	26.5	23.5	23.0	20.5	20.0	18.0
27	16.5	13.5	15.0	13.5	21.5	18.5	27.0	24.0	23.0	21.0	19.0	18.0
28	16.5	15.0	16.0	14.5	22.5	19.5	27.5	24.5	22.5	20.0	21.0	18.0
29	15.5	14.5	17.0	15.0	22.5	20.0	27.0	24.0	22.0	19.5	21.0	18.5
30	15.5	14.0	17.0	15.5	23.0	19.5	27.0	23.5	22.0	20.0	20.5	19.0
31	---	---	18.0	16.0	---	---	27.0	24.0	22.0	20.0	---	---
MONTH	16.5	7.5	20.0	12.0	23.0	14.5	27.5	19.0	26.5	19.5	23.5	16.0

14312500 LAKE CREEK NEAR DIAMOND LAKE, OR

LOCATION.--Lat 43°11'10", long 122°09'55", in NW¼SW¼ sec.30, T.27 S., R.6 E., Douglas County, Hydrologic Unit 17100301, Umpqua National Forest, on right bank 260 ft (79 m) downstream from outlet of Diamond Lake, 1.6 mi (2.6 km) northwest of town of Diamond Lake, and at mile 10.7 (17.2 km).

DRAINAGE AREA.--54.9 mi² (142.2 km²).

PERIOD OF RECORD.--May 1922 to September 1925 (no winter records), October 1926 to September 1929, April, July, August 1930, October 1930 to September 1953, October 1971 to October 1977, February 1978 to current year. Prior to October 1971 published as "at Diamond Lake, near Fork Klamath."

GAGE.--Water-stage recorder. Altitude of gage is 5,180 ft (1,580 m), from river-profile map. Prior to May 26, 1931, nonrecording gage at site 300 ft (91 m) downstream at different datum. May 26, 1931, to Oct. 6, 1933, nonrecording gage at present site and datum.

REMARKS.--Records good. Flow regulated by gates and fish racks at lake outlet. No diversion above station.

AVERAGE DISCHARGE.--34 years (water years 1927-29, 1931-53, 1972-77, 1979-80), 56.3 ft³/s (1.594 m³/s), 40,790 acre-ft/yr (50.3 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 336 ft³/s (9.52 m³/s) Jan. 1, 1943, gage height, 2.8 ft (0.85 m), from rating curve extended above 120 ft³/s (3.40 m³/s); no flow Aug. 25-27, 1931, Sept. 19, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 123 ft³/s (3.48 m³/s) Jan. 14, gage height, 1.64 ft (0.500 m); minimum, 3.2 ft³/s (0.091 m³/s) Aug. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	64	55	59	64	60	52	34	14	25	8.8	8.4
2	35	64	75	58	66	59	50	34	31	25	8.8	8.4
3	33	62	92	58	72	59	50	35	35	25	8.8	8.4
4	31	63	86	58	70	59	50	37	21	24	8.4	8.4
5	44	66	85	60	69	59	52	39	33	23	8.1	8.4
6	66	67	80	60	69	59	56	39	56	23	8.1	8.8
7	45	64	78	59	67	59	58	40	56	17	8.1	8.1
8	29	60	73	59	66	58	59	41	53	6.0	7.8	8.4
9	28	59	72	59	63	56	59	49	59	6.0	8.1	8.4
10	27	58	72	63	62	55	60	52	58	6.6	8.1	8.4
11	27	56	69	63	60	55	59	53	55	6.8	7.8	8.4
12	26	53	66	85	59	59	56	52	55	6.6	8.1	8.8
13	25	53	64	109	58	63	55	52	55	6.8	7.8	9.1
14	28	52	63	121	56	70	55	52	53	7.1	8.1	9.5
15	29	52	60	116	56	73	53	66	50	7.5	8.1	8.8
16	28	56	59	116	56	72	52	80	50	7.8	7.8	9.1
17	28	58	58	112	56	70	48	76	49	7.8	5.5	8.8
18	33	62	56	105	59	69	42	75	48	7.8	3.6	11
19	44	60	55	101	60	67	42	73	48	7.8	3.6	13
20	53	60	55	93	62	66	45	72	46	8.4	3.6	12
21	53	58	58	88	60	64	46	70	33	8.8	3.6	12
22	50	64	56	85	62	63	49	69	24	8.4	3.6	12
23	48	66	58	81	63	62	52	67	25	8.4	3.6	12
24	63	75	60	78	62	59	42	66	25	8.4	3.6	13
25	76	73	59	75	60	58	27	66	25	8.4	3.6	13
26	73	72	58	73	62	58	28	64	25	8.8	3.6	13
27	70	70	56	70	62	58	29	63	25	9.1	3.6	14
28	67	69	55	69	62	55	30	62	25	9.5	3.6	14
29	66	64	53	66	62	53	31	60	25	9.5	3.6	14
30	67	63	53	66	---	53	32	34	25	9.5	3.9	18
31	66	---	58	64	---	52	---	13	---	9.5	8.4	---
TOTAL	1394	1863	1997	2429	1805	1882	1419	1685	1182	353.3	191.8	317.6
MEAN	45.0	62.1	64.4	78.4	62.2	60.7	47.3	54.4	39.4	11.4	6.19	10.6
MAX	76	75	92	121	72	73	60	80	59	25	8.8	18
MIN	25	52	53	58	56	52	27	13	14	6.0	3.6	8.1
AC-FT	2760	3700	3960	4820	3580	3730	2810	3340	2340	701	380	630

CAL YR 1979 TOTAL 15395.1 MEAN 42.2 MAX 92 MIN 6.6 AC-FT 30540
WTR YR 1980 TOTAL 16518.7 MEAN 45.1 MAX 121 MIN 3.6 AC-FT 32760

14313000 LEMOLO LAKE NEAR TOKETTE FALLS, OR

LOCATION.--Lat 43°19'10", long 122°11'20", in SE¼NW¼ sec.11, T.26 S., R.5 E., Douglas County, Hydrologic Unit 17100301, at Lemolo No. 1 diversion dam on North Umpqua River, 0.8 mi (1.3 km) downstream from Lake Creek, 13.0 mi (20.9 km) east of town of Toketee Falls, and at mile 93.01 (149.7 km).

DRAINAGE AREA.--170 mi^2 (440 km^2).

PERIOD OF RECORD.--July 1954 to current year. Prior to October 1960, published as Lemolo Reservoir near Toketee Falls.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Pacific Power & Light Co.).

REMARKS.--Lake is formed by Lemolo No 1 diversion dam. Storage began July 15, 1954. Usable capacity for normal operation, 12,520 acre-ft (15.4 hm^3) between elevations 4,097.0 ft (1,248.77 m) and 4,148.5 ft (1,264.46 m). Dead storage below 4,097.0 ft (1,248.77 m), 1,040 acre-ft (1.28 hm^3). Water is used for power generation. Figures given herein represent total contents.

COOPERATION.--Gage readings furnished by Pacific Power & Light Co.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 14,000 acre-ft (17.3 hm^3) Dec. 24, 1964, elevation, 4,149.5 ft (1,264.77 m); minimum observed, 11 acre-ft (13,600 m^3) Mar. 5, 1955, elevation, 4,055.4 ft (1,236.09 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 13,440 acre-ft (16.6 hm^3) Aug. 11, elevation, 4,148.2 ft (1,264.37 m); minimum observed, 2,700 acre-ft (3.33 hm^3) Mar. 12, elevation, 4,112.2 ft (1,253.40 m).

MONTHEND ELEVATION AND CONTENTS AT 0900, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept.30	4,138.5	9,720	-
Oct. 31	4,123.5	5,140	-4,580
Nov. 30	4,123.1	5,040	-100
Dec. 31	4,119.0	4,020	-1,020
CAL YR 1979	-	-	+1,870
Jan. 31	4,133.0	7,910	+3,890
Feb. 29	4,112.5	2,750	-5,160
Mar. 31	4,114.2	3,040	+290
Apr. 30	4,134.9	8,520	+5,480
May 31	4,141.4	10,750	+2,230
June 30	4,146.6	12,770	+2,020
July 31	4,147.0	12,930	+160
Aug. 31	4,147.6	13,180	+250
Sept.30	4,145.5	12,320	-860
WTR YR 1980	-	-	+2,600

14313501 NORTH UMPQUA RIVER BELOW LEMOLO LAKE, NEAR TOKETEE FALLS, OR

LOCATION.--Lat 43°19'20", long 122°11'40", in NW¼NW¼ sec.11, T.26 S., R.5 E., Douglas County, Hydrologic Unit 17100301, Umpqua National Forest, on right bank 0.4 mi (0.6 km) downstream from Lemolo Lake, 13 mi (21 km) east of town of Toketee Falls, and at mile 92.6 (148.9 km).

DRAINAGE AREA.--170 mi² (440 km²).

PERIOD OF RECORD.--October 1927 to December 1945, March 1946 to current year. Published as "below Lake Creek" prior to October 1952, as "below Lake Creek, near Toketee Falls" October 1952 to September 1953, and as "below Lemolo Reservoir near Toketee Falls" October 1953 to September 1960.

REVISED RECORDS.--WSP 1448: Drainage area. WRD OR-75-1: 1964(M).

GAGE.--Water-stage recorder. Altitude of gage is 4,025 ft (1,227 m), from river-profile map. Prior to July 15, 1954, at site 1 mi (2 km) upstream at datum about 65 ft (19.8 m) higher. July 15, 1954, to Sept. 25, 1955, at site 400 ft (122 m) upstream at datum 14.11 ft (4.301 m) higher.

REMARKS.--Records good except those for period of no gage-height record, July 5-28, which are fair. Flow regulated since 1954 by Lemolo Lake (see station 14313000); also slightly regulated by Diamond Lake. All records given herein include flow in Lemolo No. 1 power canal which, beginning July 1955, diverts 0.4 mi (0.6 km) above station for power generation with return flow 4.3 mi (6.9 km) downstream.

COOPERATION.--Records of daily power plant generation furnished by Pacific Power and Light Co.

AVERAGE DISCHARGE.--52 years, 422 ft³/s (11.95 m³/s), 33.71 in/yr (856 mm/yr), 305,700 acre-ft/yr (377 hm³/yr), adjusted for storage.

EXTREMES FOR PERIOD OF RECORD.--River only, maximum discharge, 4,600 ft³/s (130 m³/s) Dec. 25, 1964, from rating curve extended above 450 ft³/s (12.7 m³/s) on basis of slope-area measurement of peak flow, gage height, 9.20 ft (2.804 m), from floodmark; minimum, 6.4 ft³/s (0.18 m³/s) July 17, 1954.

Combined flow, maximum discharge, 4,680 ft³/s (133 m³/s) Dec. 25, 1964, from river rating curve extended above 450 ft³/s (12.7 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 9.7 ft³/s (0.27 m³/s) May 13, 1955.

EXTREMES FOR CURRENT YEAR.--River only, maximum discharge, 304 ft³/s (8.61 m³/s) July 14, gage height, 5.83 ft (1.777 m), from floodmark; minimum, 22 ft³/s (0.62 m³/s) June 29 to July 2.

Combined flow, maximum daily discharge, 557 ft³/s (15.8 m³/s) Jan. 29; minimum daily, 113 ft³/s (3.20 m³/s) Apr. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	438	439	404	404	538	382	385	321	357	312	292	290
2	435	445	265	365	528	387	368	387	361	305	284	285
3	420	354	128	312	414	384	368	415	380	307	285	297
4	423	355	228	237	491	384	362	437	374	349	268	286
5	435	426	346	276	494	410	367	450	367	311	288	292
6	436	405	333	276	474	407	366	448	294	314	323	297
7	436	453	441	384	470	403	370	517	296	309	287	294
8	431	305	544	390	385	406	373	514	281	454	284	296
9	436	506	544	385	508	396	365	513	302	450	213	261
10	468	355	542	387	526	396	324	409	375	457	250	266
11	308	344	541	384	524	384	376	416	374	454	323	271
12	435	353	540	126	527	380	376	438	374	449	344	269
13	429	349	463	151	459	382	369	521	371	270	305	302
14	432	332	344	154	515	196	182	405	371	325	310	290
15	454	336	353	150	508	389	113	521	374	300	233	285
16	436	333	352	148	415	386	119	442	377	300	338	296
17	434	331	354	202	426	384	120	432	379	300	343	298
18	438	320	359	391	428	391	117	439	380	300	298	309
19	397	318	356	447	507	377	287	445	341	300	297	315
20	426	323	354	459	345	390	158	433	294	300	299	320
21	426	325	354	483	511	384	119	441	384	300	263	341
22	453	321	353	490	513	393	300	402	317	300	269	330
23	441	321	353	506	520	381	455	441	287	300	254	365
24	433	122	369	519	515	383	465	278	249	280	254	371
25	151	198	354	520	519	380	447	280	374	346	290	364
26	277	368	353	531	514	389	340	278	229	346	268	359
27	462	460	247	530	509	389	116	281	360	344	307	302
28	534	420	302	543	393	391	397	371	352	331	288	296
29	428	356	308	557	378	387	394	366	350	315	276	303
30	437	372	298	548	---	383	383	367	313	303	292	340
31	442	---	181	543	---	385	---	370	---	303	290	---
TOTAL	13031	10645	11263	11798	13854	11859	9281	12778	10237	10334	8915	9190
MEAN	420	355	363	381	478	383	309	412	341	333	288	306
MAX	534	506	544	557	538	410	465	521	384	457	344	371
MIN	151	122	128	126	345	196	113	278	229	270	213	261
AC-FT	25850	21110	22340	23400	27480	23520	18410	25350	20310	20500	17680	18230
MEAN†	346	353	347	444	388	387	401	449	375	336	292	292
CFSM†	2.04	2.08	2.04	2.61	2.28	2.28	2.36	2.64	2.21	1.98	1.72	1.72
IN.†	2.35	2.32	2.35	3.01	2.46	2.63	2.64	3.04	2.46	2.28	1.98	1.92
AC-FT†	21270	21010	21320	27290	22320	23810	23890	27580	22330	20660	17930	17370

CAL YR 1979 TOTAL 136458 MEAN 374 MAX 568 MIN 112 AC-FT 270700 MEAN† 377 CFSM† 2.22 IN.† 30.07 AC-FT† 272600
WTR YR 1980 TOTAL 133185 MEAN 364 MAX 557 MIN 113 AC-FT 264200 MEAN† 368 CFSM† 2.16 IN.† 29.43 AC-FT† 266800

† Adjusted for change in contents in Lemolo Lake.

14314501 CLEARWATER RIVER ABOVE TRAP CREEK, NEAR TOKETEE FALLS, OR

LOCATION.--Lat 43°14'40", long 122°17'10", in SW¼ sec.1, T.27 S., R.4 E., Douglas County, Hydrologic Unit 17100301, Umpqua National Forest, on right bank 900 ft (274 m) downstream from Clearwater No. 1 diversion dam, 0.4 mi (0.6 km) upstream from Trap Creek, 8.7 mi (14.0 km) east of town of Toketee Falls, and at mile 7.8 (12.6 km).

DRAINAGE AREA.--41.6 mi^2 (107.7 km^2).

PERIOD OF RECORD.--October 1927 to December 1945, March 1946 to current year. Monthly discharge only December 1927 to March 1928, published in WSP 1318. Prior to October 1952, published as "above Trap Creek."

REVISED RECORDS.--WSP 1124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3,862.84 ft (1,177.394 m) National Geodetic Vertical Datum of 1929 (levels by Pacific Power & Light Co.). Prior to Dec. 1, 1953, at two sites about 0.4 mi (0.6 km) downstream at different datums.

REMARKS.--Records good. All records given herein include flow in Clearwater No. 1 power canal, completed in June 1953, which diverts 900 ft (274 m) above station for generation of power and returns water to Clearwater River 2.5 mi (4.0 km) below station.

COOPERATION.--Records of daily power plant generation furnished by Pacific Power and Light Co.

AVERAGE DISCHARGE.--52 years, 172 ft^3/s (4.871 m^3/s), 56.15 in/yr (1,426 mm/yr), 124,600 acre-ft/yr (154 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--River only, maximum discharge, 848 ft^3/s (24.0 m^3/s) Dec. 23, 1964, gage height, 7.19 ft (2.192 m); maximum gage height, 7.87 ft (2.399 m) Dec. 23, 1964, long jam; minimum discharge, 0.08 ft^3/s (0.002 m^3/s) Sept. 21, 1977, result of beavers plugging release gate at diversion dam 900 ft (274 m) upstream.

Combined flow, maximum discharge, 1,020 ft^3/s (28.9 m^3/s) Dec. 23, 1964; minimum daily, 91 ft^3/s (2.58 m^3/s) Nov. 4-6, 1931.

EXTREMES FOR CURRENT YEAR.--River only, maximum discharge, 194 ft^3/s (5.49 m^3/s) May 6, gage height, 4.45 ft (1.356 m); minimum, 5.1 ft^3/s (0.14 m^3/s) Oct. 3-7, 9, 11, 17.

Combined flow, maximum discharge, 353 ft^3/s (10.1 m^3/s) Jan. 14; minimum daily, 113 ft^3/s (3.20 m^3/s) Nov. 20, result of regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	136	137	136	147	162	173	154	191	166	155	149	145
2	135	144	143	146	162	160	155	192	172	138	144	133
3	136	141	187	138	186	172	153	192	173	163	142	133
4	129	134	183	141	178	173	155	195	164	152	144	141
5	134	145	164	158	166	165	153	231	173	156	142	140
6	129	145	155	161	167	156	156	188	168	158	142	135
7	131	134	156	146	166	158	154	181	166	146	137	138
8	132	136	151	153	166	164	154	179	168	153	137	138
9	131	136	149	143	166	159	166	209	166	164	137	126
10	141	136	151	148	159	160	161	187	166	156	152	149
11	131	136	153	152	165	165	157	187	167	153	142	138
12	125	137	152	223	158	169	155	165	167	148	135	135
13	132	136	149	323	160	153	158	179	169	149	141	142
14	135	136	149	340	158	178	162	179	170	141	142	138
15	139	136	143	288	161	158	167	178	156	154	141	138
16	137	137	138	260	153	156	172	166	167	149	142	134
17	136	143	148	311	163	162	178	168	170	147	133	140
18	130	143	146	215	166	164	183	172	161	145	141	139
19	166	141	136	209	170	152	182	174	163	147	143	143
20	162	113	150	188	172	157	204	175	167	149	141	136
21	138	190	146	192	164	156	204	183	168	147	135	140
22	132	155	145	187	160	160	194	182	166	147	143	144
23	137	146	141	187	163	154	205	180	168	144	131	136
24	137	155	141	177	160	158	196	171	168	142	136	139
25	187	147	143	180	166	158	191	169	160	142	135	137
26	156	139	141	168	166	143	192	169	166	143	144	141
27	135	133	141	174	166	157	188	158	160	143	137	130
28	145	145	142	171	184	156	205	170	153	149	139	133
29	138	142	136	168	170	153	207	167	155	146	146	139
30	138	135	143	160	---	154	192	158	160	139	142	136
31	137	---	148	175	---	154	---	168	---	136	133	---
TOTAL	4307	4233	4606	5929	4803	4957	5253	5563	4963	4601	4348	4136
MEAN	139	141	149	191	166	160	175	179	165	148	140	138
MAX	187	190	187	340	186	178	207	231	173	164	152	149
MIN	125	113	136	138	153	143	153	158	153	136	131	126
CFSM	3.34	3.39	3.58	4.59	3.99	3.85	4.21	4.30	3.97	3.56	3.37	3.32
IN.	3.85	3.79	4.12	5.30	4.29	4.43	4.70	4.97	4.44	4.11	3.89	3.70
AC-FT	8540	8400	9140	11760	9530	9830	10420	11030	9840	9130	8620	8200

CAL YR 1979 TOTAL 57278 MEAN 157 MAX 292 MIN 110 CFSM 3.77 IN 51.22 AC-FT 113600
WTR YR 1980 TOTAL 57699 MEAN 158 MAX 340 MIN 113 CFSM 3.80 IN 51.59 AC-FT 114400

14316001 FISH CREEK AT BIG CAMAS RANGER STATION, NEAR TOKETEE FALLS, OR

LOCATION.--Lat 43°13'50", long 122°26'45", in SE¼ sec.10, T.27 S., R.3 E., Douglas County, Hydrologic Unit 17100301, Umpqua National Forest, 0.2 mi (0.3 km) upstream from Camas Creek, 0.7 mi (1.1 km) east of Big Camas ranger station, 3.2 mi (5.1 km) south of town of Toketee Falls, and at mile 4.7 (7.6 km).

DRAINAGE AREA.--68.8 mi² (178.2 km²).

PERIOD OF RECORD.--October 1947 to current year. Prior to October 1952, published as "at Big Camas ranger station."

REVISED RECORDS.--WSP 1448: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,858.52 ft (871.277 m) National Geodetic Vertical Datum of 1929 (levels by Pacific Power & Light Co.). Prior to July 10, 1951, water-stage recorder and July 10 to Aug. 10, 1951, nonrecording gage at site 1,000 ft (305 m) upstream at datum 13.72 ft (4.182 m) higher. Aug. 11 to Nov. 3, 1951, nonrecording gage at site 200 ft (61 m) downstream at different datum. Nov. 4, 1951, to Sept. 30, 1956, water-stage recorder at present site at datum 1.92 ft (0.585 m) higher.

REMARKS.--Records good. All records given herein include flow in Fish Creek power canal (diversion began June 18, 1952), which diverts water 2 mi (3 km) above station for power generation at Fish Creek powerplant; diversion discharged to North Umpqua River 600 ft (183 m) downstream from Toketee powerplant.

COOPERATION.--Records of daily powerplant generation furnished by Pacific Power and Light Co.

AVERAGE DISCHARGE.--33 years, 235 ft³/s (6.655 m³/s), 46.39 in/yr (1,178 mm/yr), 170,300 acre-ft/yr (210 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--River only, maximum discharge, 12,100 ft³/s (343 m³/s) Dec. 22, 1964, gage height, 13.9 ft (4.24 m), from floodmark; minimum, 2.3 ft³/s (0.06 m³/s) Sept. 25, 1957.

Combined flow, maximum discharge, 12,100 ft³/s (343 m³/s) Dec. 22, 1964; minimum daily, 19 ft³/s (0.54 m³/s) July 30, 1979, result of powerplant manipulation.

EXTREMES FOR CURRENT YEAR.--River only, maximum discharge, 2,510 ft³/s (71.1 m³/s) Jan. 13, gage height, 7.76 ft (2.365 m); minimum, 5.8 ft³/s (0.16 m³/s) Sept. 22.

Combined flow, peak discharges above base of 900 ft³/s (25.5 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 3	0030	1,300	36.8	-	-	Jan. 13	1330	*2,640	74.8	-	-

Minimum daily, 32 ft³/s (0.91 m³/s) Oct. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	117	153	219	196	356	164	356	209	125	65	50
2	38	108	590	198	207	323	160	350	202	124	65	38
3	38	103	896	190	347	321	153	354	219	104	63	52
4	38	134	616	187	264	295	151	372	205	112	63	51
5	51	183	502	371	258	273	169	383	214	113	62	50
6	38	150	405	364	287	257	176	371	210	107	64	49
7	36	122	334	294	247	236	164	327	219	104	58	48
8	32	102	293	257	232	218	179	308	208	100	62	48
9	40	91	257	235	219	209	265	319	199	101	62	56
10	36	87	289	200	209	197	270	295	196	103	59	44
11	37	73	229	207	194	204	260	293	188	90	58	42
12	34	74	208	1230	189	187	273	299	193	94	59	44
13	36	65	189	2360	176	195	346	294	201	92	54	51
14	43	65	171	1800	174	289	420	284	188	87	60	48
15	53	60	160	1140	166	242	421	272	178	85	53	42
16	39	109	146	890	160	215	422	253	174	85	56	38
17	42	140	147	737	172	211	468	238	168	80	52	43
18	67	132	135	597	265	208	476	241	160	82	59	56
19	201	106	140	495	301	204	483	241	161	79	57	59
20	108	104	136	433	297	212	642	250	153	77	54	55
21	82	88	145	384	264	203	576	253	149	75	50	54
22	76	133	136	342	256	194	483	260	148	76	52	49
23	108	147	124	310	240	187	455	235	166	68	56	48
24	119	540	122	289	234	190	438	223	152	74	56	43
25	376	403	117	267	250	185	413	220	165	72	52	40
26	164	274	109	248	345	183	413	216	152	70	53	40
27	120	220	107	236	372	177	430	216	155	66	47	40
28	111	183	101	205	448	174	464	209	133	80	50	42
29	90	169	104	210	395	169	441	202	132	67	52	39
30	95	154	105	215	---	171	384	192	126	68	49	39
31	165	---	192	201	---	169	---	195	---	62	50	---
TOTAL	2554	4436	7358	15311	7364	6854	10559	8521	5323	2722	1752	1398
MEAN	82.4	148	237	494	254	221	352	275	177	87.8	56.5	46.6
MAX	376	540	896	2360	448	356	642	383	219	125	65	59
MIN	32	60	101	187	160	169	151	192	126	62	47	38
CFSM	1.20	2.15	3.45	7.18	3.69	3.21	5.12	4.00	2.57	1.28	.82	.68
IN.	1.38	2.40	3.98	8.28	3.98	3.71	5.71	4.61	2.88	1.47	.95	.76
AC-FT	5070	8800	14590	30370	14610	13590	20940	16900	10560	5400	3480	2770

CAL YR 1979 TOTAL 72236 MEAN 198 MAX 1760 MIN 19 CFSM 2.88 IN 39.06 AC-FT 143300
WTR YR 1980 TOTAL 74152 MEAN 203 MAX 2360 MIN 32 CFSM 2.95 IN 40.09 AC-FT 147100

14316500 NORTH UMPQUA RIVER ABOVE COPELAND CREEK, NEAR TOKETEE FALLS, OR

LOCATION.--Lat 43°17'45", long 122°32'10", in NW¼ sec.24, T.26 S., R.2 E., Douglas County, Hydrologic Unit 17100301, Umpqua National Forest, on left bank 0.6 mi (1.0 km) upstream from Copeland Creek, 4.7 mi (7.6 km) west of town of Toketee Falls, and at mile 67.2 (108.1 km).

DRAINAGE AREA.--475 mi^2 (1,230 km^2).

PERIOD OF RECORD.--September 1949 to current year. Monthly discharge only September 1949, published in WSP 1318. Prior to October 1952, published as "above Copeland Creek."

REVISED RECORDS.--WSP 1448: 1953(M), 1954, drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 1,580 ft (482 m), from river-profile map. Prior to Aug. 1, 1976, on right bank at same datum.

REMARKS.--Records excellent. Considerable fluctuation caused by powerplants upstream; flow slightly regualted by Diamond Lake and by Lemolo Lake (see station 14313000). No diversion above station.

AVERAGE DISCHARGE.--31 years, 1,507 ft^3/s (42.68 m^3/s), 1,092,000 acre-ft/yr (1.35 km^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40,700 ft^3/s (1,150 m^3/s) Dec. 22, 1964, gage height, 19.1 ft (5.82 m), from floodmark, from rating curve extended above 7,200 ft^3/s (204 m^3/s) on basis of slope-area measurement of peak flow; minimum, 380 ft^3/s (10.8 m^3/s) Aug. 23, 1977; minimum daily, 565 ft^3/s (16.0 m^3/s) Sept. 13, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,510 ft^3/s (241 m^3/s) Jan. 13, gage height, 11.09 ft (3.380 m); minimum, 551 ft^3/s (15.6 m^3/s) Aug. 11; minimum daily, 648 ft^3/s (18.4 m^3/s) Aug. 21, Sept. 11, 12, 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	833	1180	1080	1180	1420	1550	1210	1450	1090	948	776	700
2	793	1040	1580	1270	1330	1430	1140	1540	1150	923	743	700
3	804	923	3120	1060	1650	1450	1140	1400	1190	904	748	679
4	799	948	2130	966	1510	1410	1100	1620	1210	874	727	700
5	804	1240	1950	1650	1450	1410	1100	1610	1240	892	732	689
6	810	1120	1860	1810	1610	1430	1240	1580	1130	886	765	695
7	804	1050	1650	1400	1490	1310	1180	1530	1120	917	759	695
8	804	857	1560	1450	1410	1390	1310	1530	1100	851	732	689
9	799	941	1470	1390	1440	1270	1660	1490	1050	1000	700	658
10	816	954	1600	1320	1400	1240	1660	1470	1160	1010	765	658
11	771	776	1420	1210	1420	1210	1580	1410	1140	1010	705	648
12	804	851	1380	4230	1380	1220	1630	1420	1130	1010	679	648
13	782	822	1270	8260	1350	1300	1750	1430	1140	880	716	684
14	816	748	1090	6620	1210	1650	1740	1330	1130	674	759	684
15	839	793	1080	4530	1310	1500	1650	1440	1120	705	653	663
16	851	827	1040	3460	1200	1420	1630	1400	1070	711	759	648
17	827	960	1050	3070	1120	1350	1680	1190	1040	711	754	684
18	886	1020	1000	2670	1280	1450	1740	1320	1080	765	782	748
19	1270	948	1030	2360	1510	1410	1770	1310	1020	748	759	737
20	1050	886	1020	2080	1270	1440	2030	1280	985	737	684	737
21	1040	886	1050	1890	1440	1420	2090	1330	979	716	648	737
22	839	935	1040	1800	1500	1350	1850	1240	935	743	653	737
23	941	1130	1040	1690	1480	1300	1840	1340	985	737	663	839
24	1050	2180	1040	1580	1430	1290	1940	1240	954	810	663	771
25	1410	1740	1040	1580	1520	1290	1900	1080	960	827	663	689
26	911	1410	935	1490	1530	1310	1560	1060	1000	833	700	732
27	845	1350	886	1480	1660	1230	1550	1170	1000	743	759	669
28	973	1200	917	1410	1600	1210	1690	1190	1010	839	716	669
29	1000	1100	874	1370	1650	1270	1810	1170	862	765	700	674
30	985	1140	898	1380	---	1240	1670	1150	935	782	700	684
31	1150	---	998	1320	---	1240	---	1140	---	748	684	---
TOTAL	28106	31955	40098	68976	41570	41990	47840	41860	31915	25699	22246	20945
MEAN	907	1065	1293	2225	1433	1355	1595	1350	1064	829	718	698
MAX	1410	2180	3120	8260	1660	1650	2090	1620	1240	1010	782	839
MIN	771	748	874	966	1120	1210	1100	1060	862	674	648	648
AC-FT	55750	63380	79530	136800	82450	83290	94890	83030	63300	50970	44120	41540

CAL YR 1979 TOTAL 468234 MEAN 1283 MAX 6310 MIN 603 AC-FT 928700
WTR YR 1980 TOTAL 443200 MEAN 1211 MAX 8260 MIN 648 AC-FT 879100

14316700 STEAMBOAT CREEK NEAR GLIDE, OR

LOCATION.--Lat 43°21'00", long 122°43'40", in N½ sec.32, T.25½ S., R.1 E., Douglas County, Hydrologic Unit 17100301, in Umpqua National Forest, on right bank in Canton Creek Forest Service Park, 200 ft (61 m) downstream from Canton Creek, 19 mi (31 km) northeast of Glide, and at mile 0.5 (0.8 km).

DRAINAGE AREA.--227 mi^2 (588 km^2).

PERIOD OF RECORD.--Annual maximum, water year 1956, June 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,128.55 ft (343.982 m) National Geodetic Vertical Datum of 1929 (levels by Bureau of Public Roads). Oct. 7, 1955, to June 13, 1956, nonrecording gage at site 100 ft (30 m) upstream at same datum.

REMARKS.--Records excellent. No regulation or diversion above station.

AVERAGE DISCHARGE.--24 years, 731 ft^3/s (20.70 m^3/s), 43.73 in/yr (1,111 mm/yr), 529,600 acre-ft/yr (653 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 51,000 ft^3/s (1,440 m^3/s) Dec. 22, 1964, gage height, 25.6 ft (7.80 m), from floodmark, from rating curve extended above 13,000 ft^3/s (368 m^3/s) on basis of slope-area measurement at 17.96 ft (5.474 m); minimum, 30 ft^3/s (0.85 m^3/s) Sept. 15-17, 1973.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 8,000 ft^3/s (227 m^3/s) and maximum discharge, 14,900 ft^3/s (422 m^3/s) Jan. 13, gage height, 12.67 ft (3.862 m); minimum, 34 ft^3/s (0.96 m^3/s) Oct. 11-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	660	614	836	318	1060	512	397	285	129	62	45
2	36	393	2900	848	353	836	462	365	329	122	61	46
3	36	281	4450	735	1200	713	427	337	448	116	59	48
4	36	564	2200	708	1210	681	422	329	444	118	58	47
5	36	1300	2020	2210	860	686	493	318	431	118	57	45
6	36	644	1280	1990	968	836	746	303	393	114	57	44
7	36	414	907	1220	1040	790	785	274	357	108	57	43
8	36	296	702	944	848	670	1240	250	311	104	56	42
9	36	234	579	854	692	569	2810	337	274	100	55	42
10	35	190	629	944	579	507	2370	466	247	110	55	42
11	34	164	540	796	507	540	1630	521	227	100	54	42
12	34	143	475	7790	444	559	1360	516	218	95	53	42
13	34	129	422	13200	401	1120	1450	457	240	91	52	43
14	44	118	377	8040	369	3670	1370	410	240	89	50	43
15	58	110	341	4240	333	2020	1130	369	218	89	50	43
16	47	161	314	2490	307	1290	981	322	205	86	50	42
17	42	318	292	2400	300	1190	993	285	193	81	50	41
18	64	895	274	1720	322	1430	866	261	178	79	52	49
19	825	713	292	1270	377	1330	802	247	167	78	52	58
20	670	559	345	993	526	1330	938	230	156	78	50	57
21	526	444	1020	813	530	1180	1120	221	150	76	49	67
22	234	813	1240	686	676	944	981	230	145	75	48	55
23	401	1570	831	594	1160	854	836	234	175	72	48	52
24	333	4200	819	526	919	774	768	261	164	72	47	48
25	950	2260	746	475	860	708	686	453	167	69	46	46
26	502	1300	594	435	1100	686	629	550	181	68	46	44
27	318	895	507	397	1110	702	614	484	170	68	45	43
28	278	686	457	349	1420	634	619	444	156	67	45	42
29	250	594	422	303	1380	604	535	393	145	65	45	42
30	303	614	471	303	---	594	448	341	136	63	44	40
31	1120	---	559	292	---	564	---	300	---	62	45	---
TOTAL	7426	21662	27619	59401	21109	30071	29023	10905	7150	2762	1598	1383
MEAN	240	722	891	1916	728	970	967	352	238	89.1	51.5	46.1
MAX	1120	4200	4450	13200	1420	3670	2810	550	448	129	62	67
MIN	34	110	274	292	300	507	422	221	136	62	44	40
CFSM	1.06	3.18	3.93	8.44	3.21	4.27	4.26	1.55	1.05	.39	.23	.20
IN.	1.22	3.55	4.53	9.73	3.46	4.93	4.76	1.79	1.17	.45	.26	.23
AC-FT	14730	42970	54780	117800	41870	59650	57570	21630	14180	5480	3170	2740

CAL YR 1979 TOTAL 252286 MEAN 691 MAX 9630 MIN 34 CFSM 3.04 IN 41.34 AC-FT 500400
WTR YR 1980 TOTAL 220109 MEAN 601 MAX 13200 MIN 34 CFSM 2.65 IN 36.07 AC-FT 436600

14318000 LITTLE RIVER AT PEEL, OR

LOCATION.--Lat 43°15'10", long 12°01'30", in NW¼ sec.2, T.27 S., R.3 W., Douglas County, Hydrologic Unit 17100301, on left bank 0.6 mi (1.0 km) southeast of Peel, 0.9 mi (1.5 km) downstream from Cavitt Creek, and at mile 6.3 (10.1 km).

DRAINAGE AREA.--177 mi^2 (458 km^2).

PERIOD OF RECORD.--August 1954 to current year.

GAGE.--Water-stage recorder. Datum of gage is 828.33 ft (252.475 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. No regulation. Small diversions for rural domestic use and irrigation above station.

AVERAGE DISCHARGE.--26 years, 470 ft^3/s (13.31 m^3/s), 36.06 in/yr (916 mm/yr), 340,500 acre-ft/yr (420 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,100 ft^3/s (598 m^3/s) Dec. 11, 1956, gage height, 19.63 ft (5.983 m), from rating curve extended above 5,900 ft^3/s (167 m^3/s) on basis of slope-area measurement at gage height 16.55 ft (5.044 m); minimum, 14 ft^3/s (0.40 m^3/s) Sept. 2, 9, 10, 28, 29, 1967, Sept. 25-27, 1974, Aug. 18, 19, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Nov. 22, 23, 1953, reached a stage of 20.6 ft (6.28 m), from floodmark, discharge, 22,700 ft^3/s (643 m^3/s), from rating curve extended above 5,900 ft^3/s (167 m^3/s) on basis of slope-area measurement at gage height 16.55 ft (5.044 m).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 6,000 ft^3/s (170 m^3/s) and maximum discharge, 7,120 ft^3/s (202 m^3/s) Jan. 12, gage height, 11.20 ft (3.414 m); minimum, 15 ft^3/s (0.42 m^3/s) Oct. 12, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	463	367	579	219	524	414	280	251	89	34	22
2	17	299	1230	560	222	442	382	254	267	84	34	23
3	18	230	2840	497	386	410	356	239	410	80	33	26
4	17	251	1610	455	390	438	345	222	442	84	33	25
5	16	506	1450	975	341	438	402	205	430	85	33	23
6	16	352	919	1060	382	438	546	191	378	82	33	22
7	17	257	663	752	378	390	603	181	331	77	33	21
8	18	202	510	584	345	345	780	171	283	72	32	21
9	18	163	414	497	310	306	1230	239	254	71	32	21
10	17	140	463	489	276	280	1250	331	230	71	31	20
11	16	121	394	459	254	352	987	430	210	66	29	19
12	16	109	345	3640	233	378	836	414	197	63	28	20
13	16	98	306	6000	219	752	848	356	199	62	27	23
14	25	91	273	4380	205	2680	836	320	189	59	28	25
15	44	84	248	2780	191	1540	791	293	171	58	28	23
16	32	101	224	1940	183	1010	678	260	159	55	27	22
17	25	222	208	1870	181	919	637	230	154	52	26	20
18	33	608	194	1320	219	1120	556	210	142	51	27	26
19	334	560	205	950	242	950	515	191	131	50	29	38
20	345	410	216	736	398	877	593	176	125	50	27	34
21	327	313	842	589	352	758	819	163	119	49	26	39
22	161	467	925	493	560	618	709	173	113	46	24	31
23	194	866	637	422	769	556	603	194	152	45	24	26
24	176	1900	589	371	556	497	565	245	129	46	24	24
25	637	1380	489	331	480	455	502	584	119	44	24	23
26	334	901	394	303	446	446	450	668	115	42	23	23
27	230	637	338	276	438	497	410	533	109	41	23	21
28	208	493	299	245	720	459	398	426	101	40	23	22
29	199	438	276	210	637	430	349	349	98	38	23	21
30	216	402	296	224	---	410	306	299	94	37	23	20
31	510	---	434	216	---	410	---	264	---	37	22	---
TOTAL	4249	13064	18598	34203	10532	20125	18696	9091	6102	1826	863	724
MEAN	137	435	600	1103	363	649	623	293	203	58.9	27.8	24.1
MAX	637	1900	2840	6000	769	2680	1250	668	442	89	34	39
MIN	16	84	194	210	181	280	306	163	94	37	22	19
CFSM	.77	2.46	3.39	6.23	2.05	3.67	3.52	1.66	1.15	.33	.16	.14
IN.	.89	2.75	3.91	7.19	2.21	4.23	3.93	1.91	1.28	.38	.18	.15
AC-FT	8430	25910	36890	67840	20890	39920	37080	18030	12100	3620	1710	1440

CAL YR 1979 TOTAL 164677 MEAN 451 MAX 6920 MIN 16 CFSM 2.55 IN 34.61 AC-FT 326600
WTR YR 1980 TOTAL 138073 MEAN 377 MAX 6000 MIN 16 CFSM 2.13 IN 29.02 AC-FT 273900

14319500 NORTH UMPQUA RIVER AT WINCHESTER, OR

LOCATION.--Lat 43°16'20", long 123°24'40", in NW¼NE¼ sec.33, T.26 S., R.6 W., Douglas County, Hydrologic Unit 17100301, on left bank 400 ft (122 m) downstream from county bridge, 3.0 mi (4.8 km) west of Winchester, and at mile 1.8 (2.9 km).

DRAINAGE AREA.--1,344 mi² (3,481 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1908 to December 1913, October 1923 to September 1929, August 1954 to current year. Prior to December 1908, monthly discharge only, published in WSP 1318.

REVISED RECORDS.--WSP 1448: 1909-12, drainage area. WRD Oreg. 1972: 1965(M).

GAGE.--Water-stage recorder. Datum of gage is 372.97 ft (113.681 m) National Geodetic Vertical Datum of 1929 (Douglas County Road Department bench mark). Oct. 1, 1908, to Dec. 31, 1913, and Oct. 1, 1923, to Sept. 30, 1929, nonrecording gage at site 4.8 mi (7.7 km) upstream at different datums. Aug. 27, 1954, to Aug. 12, 1965, water-stage recorder on right bank at same datum.

REMARKS.--Water-discharge records excellent. Diurnal fluctuation caused by upstream powerplants; slight regulation by Lemolo Lake (see station 14313000) and Diamond Lake. Several small diversions for irrigation above station.

AVERAGE DISCHARGE.--37 years, 3,722 ft³/s (105.4 m³/s), 37.61 in/yr (955 mm/yr), 2,697,000 acre-ft/yr (3.33 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 150,000 ft³/s (4,250 m³/s) Dec. 22, 1964, gage height, 34.2 ft (10.42 m), from floodmark; minimum, 383 ft³/s (10.8 m³/s) Sept. 25, 1960; minimum daily, 578 ft³/s (16.4 m³/s) Sept. 14, 1959.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 29, 1950, reach a stage of 23.2 ft (7.07 m), from floodmark, at site 4.8 mi (7.7 km) upstream at different datum, discharge, 88,000 ft³/s (2,490 m³/s). Flood of Nov. 23, 1953, reach a stage of 28.4 ft (8.66 m), from floodmarks, present site and datum, discharge, 93,300 ft³/s (2,640 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base 20,000 ft³/s (566 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 3	0800	22,800	646	10.81	3.295	Jan. 13	2100	*46,800	1,330	*17.11	5.215

Minimum, 649 ft³/s (18.4 m³/s) Sept. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	909	3850	2990	3570	2460	5130	3250	2990	2160	1400	893	757
2	917	2580	5320	4140	2590	4370	2990	2810	2200	1370	917	779
3	870	2070	18300	3850	3790	3850	2760	2730	2580	1330	886	801
4	886	1800	10700	3360	5320	3830	2730	2520	2940	1310	893	779
5	870	4020	10200	6000	4120	3680	2760	2700	2900	1300	862	786
6	878	3550	7110	8940	4190	4000	3640	2620	2790	1300	870	772
7	886	2550	5450	6150	4540	3900	4520	2490	2550	1270	901	779
8	886	2110	4480	4920	4140	3520	4920	2460	2400	1280	893	764
9	893	1650	3740	4330	3640	3290	8250	2550	2230	1210	870	757
10	886	1660	3640	4790	3340	2990	9520	3080	2100	1360	816	735
11	886	1520	3500	4160	3100	3150	7460	3130	2100	1380	878	715
12	839	1310	3170	14000	2920	3450	6200	3170	2050	1350	816	715
13	886	1330	2900	43700	2840	4810	6000	3020	2060	1330	794	722
14	901	1260	2610	34700	2610	14800	6150	2890	2090	1180	809	779
15	974	1160	2260	22100	2380	11500	5590	2590	2010	941	862	779
16	1020	1240	2200	13700	2400	7680	4980	2650	1900	966	772	750
17	983	1550	2060	12500	2240	6330	4750	2410	1840	966	854	695
18	966	3340	2020	9770	2400	7200	4560	2160	1730	941	870	779
19	2000	4190	2000	7560	2720	6530	4250	2230	1730	991	901	886
20	3250	3030	2190	6240	3270	6110	4580	2140	1620	974	870	909
21	2730	2490	3870	5220	3240	5770	6780	2110	1560	958	794	909
22	1940	2470	6510	4560	4180	4940	5640	2150	1520	917	728	909
23	1590	5830	4750	4060	6050	4370	4980	2170	1540	941	735	870
24	2060	10400	4080	3660	5090	4040	4700	2240	1640	925	757	950
25	3250	11000	3740	3360	4370	3750	4440	2650	1530	1000	750	893
26	3500	7040	3170	3130	4370	3610	4000	3170	1570	1020	735	786
27	2020	5090	2680	2990	4720	3740	3520	2990	1560	1020	794	824
28	1790	4000	2460	2780	5550	3460	3570	2860	1540	917	862	764
29	1900	3290	2330	2560	5960	3320	3570	2590	1500	1000	801	750
30	1800	3070	2440	2440	---	3220	3310	2430	1320	917	779	750
31	3080	---	2940	2490	---	3180	---	2270	---	950	786	---
TOTAL	47246	100450	135810	255730	108540	153520	144370	80970	59260	34714	25748	23843
MEAN	1524	3348	4381	8249	3743	4952	4812	2612	1975	1120	831	795
MAX	3500	11000	18300	43700	6050	14800	9520	3170	2940	1400	917	950
MIN	839	1160	2000	2440	2240	2990	2730	2110	1320	917	728	695
CFSM	1.13	2.49	3.26	6.14	2.79	3.69	3.58	1.94	1.47	.83	.62	.59
IN.	1.31	2.78	3.76	7.08	3.00	4.25	4.00	2.24	1.64	.96	.71	.66
AC-FT	93710	199200	269400	507200	215300	304500	286400	160600	117500	68860	51070	47290

CAL YR 1979 TOTAL 1310741 MEAN 3591 MAX 35000 MIN 735 CFSM 2.67 IN 36.28 AC-FT 2600000
WTR YR 1980 TOTAL 1170201 MEAN 3197 MAX 43700 MIN 695 CFSM 2.38 IN 32.39 AC-FT 2321000

14319500 NORTH UMPQUA RIVER AT WINCHESTER, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967-69, 1971 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: January 1971 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 26.5°C Aug. 10, 1972, Aug. 8, 9, 1978; minimum, 0.0°C at times in 1971-72, 1974, 1977, 1980.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 25.5°C July 21, 22; minimum, 0.0°C Jan. 30.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	17.0	15.5	10.0	9.0	7.0	6.5	---	---	4.0	2.0	8.0	7.5
2	16.5	15.0	9.5	9.0	8.0	7.0	---	---	5.0	4.0	9.0	7.5
3	16.5	15.0	9.5	9.0	9.0	8.0	7.0	---	6.0	5.0	9.0	8.5
4	16.5	15.0	9.0	9.0	8.5	8.5	7.5	7.0	6.5	6.0	9.5	8.5
5	17.0	15.0	9.5	9.0	8.5	7.5	7.5	7.5	6.0	6.0	9.5	8.5
6	16.0	15.5	9.5	9.0	7.5	7.0	7.5	6.5	6.5	6.0	9.0	8.0
7	16.0	15.0	9.5	8.5	7.0	6.5	6.5	5.5	6.5	6.0	9.0	7.5
8	16.0	15.0	9.0	8.0	6.5	6.5	6.0	5.5	6.5	6.0	8.5	7.5
9	15.0	14.0	8.0	7.5	6.5	6.0	6.0	5.5	6.0	5.0	8.0	7.0
10	---	14.0	8.0	7.0	6.5	4.0	5.5	4.5	6.0	5.0	8.0	7.5
11	---	---	7.5	6.5	6.0	4.0	4.5	4.0	6.5	5.5	8.0	7.5
12	14.5	14.0	6.5	6.0	4.5	4.0	8.0	4.5	6.0	5.0	7.5	6.5
13	15.0	13.5	6.0	5.5	4.0	3.5	8.5	8.0	5.0	4.5	7.0	6.5
14	14.0	13.5	6.0	5.5	4.0	4.0	---	---	5.0	5.0	7.0	6.5
15	14.0	13.0	6.0	5.5	4.0	3.5	---	---	6.0	5.0	6.5	6.0
16	14.5	13.0	6.5	6.0	4.0	3.5	---	---	6.5	6.0	7.0	5.5
17	14.0	13.0	7.0	6.5	5.0	4.0	---	---	6.5	6.0	6.5	6.5
18	13.0	12.5	7.5	7.0	6.0	5.0	---	---	8.0	6.5	7.5	6.5
19	12.5	10.5	7.5	7.0	---	6.0	---	---	8.0	7.5	8.5	7.0
20	10.5	9.5	7.0	6.0	---	---	---	---	7.5	7.0	8.0	7.5
21	9.5	9.0	6.0	5.0	---	---	---	---	7.5	6.5	7.5	7.0
22	10.0	9.5	6.0	5.5	---	---	---	---	7.5	6.5	7.5	6.5
23	11.0	10.0	6.5	6.0	---	---	---	---	6.5	6.0	8.5	7.0
24	11.5	10.5	8.0	6.5	---	---	---	4.5	8.0	6.5	9.0	7.0
25	11.5	11.0	8.0	7.0	---	---	5.0	4.5	8.0	7.5	9.0	7.5
26	11.5	10.5	7.0	6.0	---	---	4.5	4.0	8.5	8.0	8.5	7.5
27	11.5	11.5	6.0	5.5	---	---	4.0	3.0	8.5	8.0	8.5	7.0
28	11.0	10.5	5.5	5.0	---	---	3.0	2.0	9.0	8.0	8.5	7.0
29	10.5	9.5	6.0	5.0	---	---	2.0	.5	8.5	8.0	8.5	7.0
30	10.0	9.5	6.5	6.0	---	---	.5	.0	---	---	8.5	7.0
31	9.5	9.5	---	---	---	---	2.0	.5	---	---	8.5	7.0
MONTH	17.0	9.0	10.0	5.0	9.0	3.5	8.5	.0	9.0	2.0	9.5	5.5

14319500 NORTH UMPQUA RIVER AT WINCHESTER, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.0	6.5	13.5	11.0	15.0	14.0	21.0	18.0	24.5	21.5	19.5	17.0
2	8.5	6.5	13.0	12.0	14.0	13.5	21.0	19.0	24.5	21.5	18.5	17.5
3	8.0	7.5	14.0	11.5	13.5	12.5	19.0	18.0	23.5	21.0	18.0	16.5
4	8.0	7.0	15.0	13.5	13.5	12.5	18.5	17.5	23.0	20.5	18.5	16.0
5	8.5	7.5	15.0	14.0	13.0	12.5	18.0	17.0	22.5	20.5	19.5	17.0
6	8.5	8.0	15.0	13.5	13.0	11.5	19.5	17.0	22.0	19.5	19.5	17.5
7	8.0	7.0	14.5	13.0	13.5	12.0	20.5	18.0	22.5	19.5	19.5	18.0
8	8.0	6.5	14.0	13.0	15.5	13.5	21.0	19.0	22.0	19.5	19.5	17.5
9	8.5	7.5	13.0	12.0	17.0	15.5	20.0	19.0	22.5	20.0	20.0	18.0
10	9.0	7.5	12.0	10.5	17.0	16.0	21.0	18.5	23.5	20.5	20.5	18.5
11	9.5	7.5	10.5	10.0	17.0	15.5	21.5	19.0	23.5	21.0	20.0	18.5
12	11.0	8.0	10.5	9.5	16.0	15.0	21.0	19.5	22.5	21.0	19.0	17.5
13	11.0	9.5	11.0	10.0	15.0	14.0	21.5	19.0	22.5	20.5	17.5	15.5
14	10.5	9.5	11.5	10.5	14.5	13.5	22.0	20.0	22.0	20.0	16.5	15.0
15	11.0	9.0	12.0	11.0	16.0	13.5	23.0	20.0	22.0	19.5	17.0	14.5
16	11.5	9.5	13.0	11.5	16.0	14.5	24.0	21.0	22.0	19.5	17.5	15.0
17	11.5	10.0	14.5	12.5	17.0	14.0	24.0	21.5	21.5	19.5	17.5	15.5
18	12.0	9.5	15.0	14.0	18.5	15.5	24.0	21.5	20.5	19.5	17.0	16.0
19	12.0	10.5	16.0	14.5	19.0	17.0	23.5	21.0	20.5	18.0	16.5	15.5
20	11.5	10.0	17.5	15.5	19.5	17.5	24.5	21.5	21.0	18.5	16.0	15.0
21	10.0	8.5	16.5	14.5	19.5	17.0	25.5	22.5	20.5	18.5	16.0	14.5
22	9.0	8.0	14.5	13.5	19.0	17.5	25.5	23.0	20.5	18.5	16.0	14.5
23	11.0	8.5	14.0	13.0	18.5	17.5	24.0	22.5	21.0	18.5	16.5	14.5
24	12.0	10.5	13.0	11.5	17.5	16.0	23.5	21.5	20.0	19.0	16.5	15.0
25	12.0	10.5	11.5	11.0	17.0	16.0	24.0	21.5	20.5	18.0	16.5	14.5
26	13.0	10.0	11.5	10.0	17.0	15.5	24.0	22.0	20.0	18.0	17.0	15.0
27	14.5	11.5	12.5	11.0	18.5	15.5	24.5	22.0	20.0	18.5	16.0	15.0
28	14.5	13.0	13.5	12.0	19.5	17.0	25.0	22.5	19.5	18.0	16.5	14.5
29	13.0	11.5	14.5	13.0	19.0	17.0	24.5	22.5	19.0	17.5	17.0	15.0
30	13.0	11.0	15.5	14.0	20.0	17.0	25.0	22.0	19.0	17.0	17.0	15.5
31	---	---	15.5	14.5	---	---	25.0	22.0	19.0	17.0	---	---
MONTH	14.5	6.5	17.5	9.5	20.0	11.5	25.5	17.0	24.5	17.0	20.5	14.5

14319900 CALAPOOYA CREEK AT NONPAREIL, OR

LOCATION.--Lat 43°25'04", long 123°09'13", in SW¼SE¼ sec.3, T.25 S., R.4 W., Douglas County, Hydrologic Unit 17100303, on left bank 0.3 mi (0.5 km) upstream from county road bridge, 0.9 mi (1.4 km) northeast of Nonpareil, and at mile 26.7 (43.0 km).

DRAINAGE AREA.--88.6 mi² (229.5 km²).

PERIOD OF RECORD.--July 1976 to current year.

GAGE.--Water-stage recorder. Datum of gage is 699.22 ft (213.122 m) National Geodetic Vertical Datum of 1929 (Douglas County Survey bench mark).

REMARKS.--Records good. No regulation. Only minor diversions by pumping for irrigation above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,970 ft³/s (112 m³/s) Feb 7, 1979, gage height, 8.49 ft (2.588 m); minimum 5.3 ft³/s (0.15 m³/s) Aug. 17-19, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,700 ft³/s (76.5 m³/s) and maximum discharge, 2,880 ft³/s (81.6 m³/s) Jan. 13, gage height, 7.36 ft (2.243 m); minimum, 9.0 ft³/s (0.25 m³/s) Oct. 11-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	172	193	201	114	289	212	141	110	54	19	12
2	10	124	529	206	116	250	196	128	122	49	19	12
3	10	96	932	217	245	219	182	122	173	49	19	14
4	10	126	838	214	248	200	177	114	166	52	19	13
5	10	259	788	632	212	196	217	108	157	52	19	13
6	10	188	508	615	224	219	355	104	148	49	19	12
7	10	136	359	419	224	200	464	96	141	44	20	12
8	11	105	274	343	207	186	501	92	126	41	19	11
9	12	87	220	320	189	168	688	137	118	41	18	11
10	12	74	245	387	168	159	660	189	110	41	18	10
11	9.0	64	206	359	152	210	516	231	104	38	17	9.3
12	9.0	57	183	1300	141	253	410	226	104	37	17	9.3
13	9.0	53	160	2460	131	527	349	200	116	35	17	12
14	18	48	140	2090	122	1710	315	189	112	35	17	12
15	25	45	126	1370	112	991	281	170	100	35	15	12
16	18	51	113	885	106	692	245	152	92	32	15	12
17	15	105	103	706	106	588	219	135	90	31	14	10
18	17	340	96	557	122	678	198	124	80	28	14	10
19	140	411	113	438	150	584	180	114	75	27	15	14
20	136	242	115	352	157	516	221	108	69	27	15	19
21	122	172	353	292	155	446	428	102	68	27	13	25
22	67	262	481	250	292	374	374	110	66	25	13	19
23	57	525	376	221	453	330	307	116	84	25	12	17
24	56	637	366	200	327	295	278	124	73	24	12	14
25	225	655	292	182	267	267	243	186	75	23	12	14
26	157	575	233	168	238	261	217	219	75	23	12	14
27	120	419	196	152	233	250	196	193	68	23	11	13
28	122	304	167	139	342	226	186	164	62	22	11	13
29	120	250	145	120	330	210	164	141	59	20	12	13
30	115	220	160	118	---	198	150	124	56	19	12	13
31	188	---	188	116	---	203	---	110	---	19	12	---
TOTAL	1850.0	6802	9198	16029	5883	11895	9129	4469	2999	1047	477	394.6
MEAN	59.7	227	297	517	203	384	304	144	100	33.8	15.4	13.2
MAX	225	655	932	2460	453	1710	688	231	173	54	20	25
MIN	9.0	45	96	116	106	159	150	92	56	19	11	9.3
CFSM	.67	2.56	3.35	5.84	2.29	4.33	3.43	1.63	1.13	.38	.17	.15
IN.	.78	2.86	3.86	6.73	2.47	4.99	3.83	1.88	1.26	.44	.20	.17
AC-FT	3670	13490	18240	31790	11670	23590	18110	8860	5950	2080	946	783

CAL YR 1979 TOTAL 79683.0 MEAN 218 MAX 2440 MIN 9.0 CFSM 2.46 IN 33.46 AC-FT 158100
WTR YR 1980 TOTAL 70172.6 MEAN 192 MAX 2460 MIN 9.0 CFSM 2.17 IN 29.46 AC-FT 139200

14321000 UMPQUA RIVER NEAR ELKTON, OR
(National stream-quality accounting network station)

LOCATION.--Lat 43°35'10", long 123°33'15", in NW¼ sec.8, T.23 S., R.7 W., Douglas County, Hydrologic Unit 17100303, on left bank 3.5 mi (5.6 km) south of Elkton, 8.3 mi (13.4 km) upstream from Elk Creek, and at mile 56.9 (91.6 km).

DRAINAGE AREA.--3,683 mi² (9,539 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1905 to current year.

REVISED RECORDS.--WSP 1184: 1927(M), 1938(M), 1943(M), 1946(M). WSP 1448: 1911-13, drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 90.42 ft (27.560 m) National Geodetic Vertical Datum of 1929. Prior to June 29, 1972, at site 2,400 ft (732 m) downstream at same datum. See WSP 1931 or 2135 for history of changes prior to June 29, 1972.

REMARKS.--Water-discharge records good. Regulation by powerplants on North Umpqua River ordinarily does not affect discharge at this station. Diversions for irrigation above station.

AVERAGE DISCHARGE.--75 years, 7,470 ft³/s (211.6 m³/s), 27.54 in/yr (700 mm/yr), 5,412,000 acre-ft/yr (6.67 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 265,000 ft³/s (7,500 m³/s) Dec. 23, 1964, gage height, 51.95 ft (15.834 m), from floodmarks, minimum observed, 640 ft³/s (18.1 m³/s) July 18, 1926.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least December 1861, that of Dec. 2, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 52,000 ft³/s (1,470 m³/s) and maximum discharge, 103,000 ft³/s (2,917 m³/s) Jan. 14, gage height, 28.94 ft (8.821 m); minimum, 921 ft³/s (26.1 m³/s) Oct. 1, Aug. 18, 24, Sept. 18, 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	949	5170	6040	16300	4610	10500	6250	5720	3360	1560	1040	987
2	1040	5630	6740	14300	4630	9240	6190	5170	3190	1570	1030	987
3	1020	4070	30100	11600	4770	8110	5740	4920	3310	1550	1030	987
4	1010	3400	28800	9880	7590	7570	5450	4610	3780	1520	1030	987
5	996	3300	24300	10600	7690	7620	5430	4450	4080	1500	1030	987
6	996	6360	18200	19600	6760	7500	6190	4420	4030	1450	1030	987
7	987	5340	13100	16100	7330	7570	10200	4260	3860	1460	1030	987
8	996	4120	10300	12200	7120	6880	11200	4000	3570	1420	1030	987
9	987	3380	8490	10500	6500	6330	13200	3950	3300	1420	1040	987
10	996	2730	7170	10800	5950	5740	19200	4220	3040	1350	1070	977
11	987	2590	6940	10700	5580	5520	16800	4970	2870	1420	1030	968
12	987	2250	6080	19800	5170	6160	13500	5210	2780	1420	1030	949
13	1010	1980	5520	89500	4810	7150	11700	5170	2730	1390	1060	940
14	977	1920	4990	92100	4630	26400	11300	4840	2770	1360	1020	940
15	1030	1810	4450	65700	4360	36700	10800	4540	2770	1280	977	987
16	1060	1710	4020	37400	4140	23700	9690	4280	2580	1110	996	987
17	1140	1780	3830	32000	4020	17200	8690	4120	2430	1070	1020	977
18	1200	2560	3610	26300	4030	16300	8310	3730	2310	1060	949	930
19	1300	7570	3530	19800	6100	16200	7760	3490	2190	1040	1020	996
20	2590	8110	3900	15400	9170	14200	7570	3430	2130	1030	1030	1040
21	4260	6000	5630	12600	9550	13600	12200	3250	2000	1030	1040	1170
22	4580	5010	17800	10700	9570	12300	14600	3190	1920	1030	1030	1200
23	3210	8560	14700	9360	16700	10700	12200	3270	1890	1030	977	1260
24	2580	16600	12500	8210	15000	9590	10500	3380	1930	1020	930	1230
25	3210	26600	13000	7330	11500	8720	9550	3410	2030	1020	949	1180
26	8720	19100	10200	6720	10100	7980	8510	4380	1950	1030	968	1130
27	6000	13500	7980	6210	9590	7670	7420	5100	1930	1060	968	1060
28	3950	10200	6610	5780	9710	7310	6760	4720	1900	1060	977	1020
29	3300	8030	5850	5240	11200	6700	6570	4330	1840	1050	1010	1010
30	3160	6630	5470	4790	---	6310	6250	3910	1750	1040	1020	968
31	2990	---	9060	4580	---	6080	---	3600	---	1040	1010	---
TOTAL	68218	196010	308910	622100	217880	343550	289730	132040	80220	38390	31371	30802
MEAN	2201	6534	9965	20070	7513	11080	9658	4259	2674	1238	1012	1027
MAX	8720	26600	30100	92100	16700	36700	19200	5720	4080	1570	1070	1260
MIN	949	1710	3530	4580	4020	5520	5430	3190	1750	1020	930	930
CFSM	.60	1.77	2.71	5.45	2.04	3.01	2.62	1.16	.73	.34	.28	.28
IN.	.69	1.98	3.12	6.28	2.20	3.47	2.93	1.33	.81	.39	.32	.31
AC-FT	135300	388800	612700	1234000	432200	681400	574700	261900	159100	76150	62220	61100

CAL YR 1979	TOTAL	2459192	MEAN	6738	MAX	60000	MIN	903	CFSM	1.83	IN	24.84	AC-FT	4878000
WTR YR 1980	TOTAL	2359221	MEAN	6446	MAX	92100	MIN	930	CFSM	1.75	IN	23.83	AC-FT	4680000

14321000 UMPQUA RIVER NEAR ELKTON, OR--Continued
(National stream quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: April 1971 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 30.0°C July 14, 1971; minimum, 0.0°C Jan. 7, 8, 11, 12, and probably Jan. 9, 10, 1974.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 27.0°C July 21, 22, 28; minimum, 0.5°C Jan. 30, 31.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	PH FIELD (UNITS)	OXYGEN, DIS-SOLVED (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	SILICA, DIS-SOLVED (MG/L AS SIO2)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT												
23...	1200	3180	11.8	7.4	10.4	113	110	330	16	9.9	3.8	6.0
NOV												
14...	1545	1890	8.4	7.3	12.0	86	K11	K9	16	7.5	2.9	4.7
DEC												
19...	1500	3500	6.0	7.1	12.5	88	22	28	17	8.0	3.0	4.2
JAN												
16...	1600	34200	7.9	7.1	12.0	63	K58	102	15	5.1	2.1	2.9
FEB												
13...	1430	4840	6.2	7.3	12.2	83	K21	K13	17	6.9	2.9	4.2
APR												
14...	1330	11300	11.6	7.4	10.5	74	K11	K6	18	6.8	2.8	3.9
MAY												
14...	1515	4800	12.8	7.6	10.9	86	K7	K5	17	7.5	2.9	4.2
JUN												
16...	1230	2300	17.5	7.7	9.6	85	K3	K2	17	7.0	2.6	4.9
JUL												
23...	1700	1120	25.8	8.3	9.3	88	K4	94	15	6.6	2.9	5.3
AUG												
13...	1330	1060	22.7	8.0	8.0	85	K5	K14	--	6.0	2.7	5.5
SEP												
18...	1400	910	19.5	8.1	9.3	86	K5	57	19	5.7	2.6	5.7

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
OCT												
23...	1.1	29	10	7.2	.0	.53	.10	.53	.020	.09	.64	.030
NOV												
14...	.7	34	2.8	3.5	.1	.17	.08	.42	.010	.07	.50	.030
DEC												
19...	.6	21	4.0	3.5	.0	.25	.17	.37	.000	.14	.51	.020
JAN												
16...	.6	22	1.0	2.0	.1	.71	.12	.73	.040	.13	.90	.010
FEB												
13...	.6	30	4.0	3.5	.1	.35	.12	--	--	.13	--	.020
APR												
14...	.6	25	1.1	2.4	.1	.32	.06	.66	.000	.03	.69	.050
MAY												
14...	.7	28	2.6	2.6	.1	.29	.01	.31	.010	.02	.34	.020
JUN												
16...	.6	39	2.3	2.5	.1	.30	.01	.24	.030	.02	.29	.020
JUL												
23...	1.3	36	1.0	3.5	.0	.29	.00	.94	.000	.00	.94	.040
AUG												
13...	1.2	30	1.3	3.9	.1	.29	.00	.39	.000	.00	.39	.030
SEP												
18...	1.1	36	1.1	4.3	.1	.72	.00	4.6	.000	.00	4.6	.060

14321000 UMPQUA RIVER NEAR ELKTON, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)	CARBON, ORGANIC TOTAL (MG/L AS C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	TUR-BID-ITY (NTU)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT												
23...	.040	3.4	.1	--	40	11	92	72	3.6	--	--	--
NOV												
14...	.040	--	--	2.0	31	0	63	59	2.1	3	15	97
DEC												
19...	.040	--	--	2.3	32	11	67	54	4.0	3	28	99
JAN												
16...	.060	3.2	2.4	--	21	0	60	43	51	154	14200	77
FEB												
13...	.030	--	--	1.4	29	0	63	58	5.3	3	39	81
APR												
14...	.050	1.8	.2	--	29	4	64	51	9.2	10	305	78
MAY												
14...	.030	--	--	3.5	31	3	54	54	3.2	3	39	79
JUN												
16...	.090	--	--	1.5	28	0	63	61	.80	2	12	71
JUL												
23...	.060	2.3	.5	--	28	0	56	57	.60	4	12	74
AUG												
13...	.040	--	--	3.4	26	0	60	--	1.6	4	11	73
SEP												
18...	.070	--	--	1.9	25	0	50	61	1.8	2	4.9	80

DATE	IRON, DIS-SOLVED (UG/L AS FE)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	ARSENIC DIS-SOLVED (UG/L AS AS)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)
OCT									
23...	170	250	10	20	0	1	20	200	<1
JAN									
16...	130	5200	6	120	0	1	10	100	2
APR									
14...	10	760	2	20	0	1	20	100	2
JUL									
23...	40	110	2	20	1	1	20	<100	2

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
OCT									
23...	0	0	0	<3	0	3	6	1	2
JAN									
16...	1	0	20	<3	5	0	12	0	5
APR									
14...	2	0	0	<3	0	4	3	0	4
JUL									
23...	0	10	10	3	0	2	13	0	6

DATE	SILVER, DIS-SOLVED (UG/L AS AG)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SELE-NIUM, TOTAL (UG/L AS SE)	NICKEL, DIS-SOLVED (UG/L AS NI)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)
OCT								
23...	0	0	6	0	0	0	0	2
JAN								
16...	0	0	9	20	0	0	3	16
APR								
14...	0	2	<3	20	0	0	2	6
JUL								
23...	0	3	<3	10	0	0	1	8

14321000 UMPQUA RIVER NEAR ELKTON, OR--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

DATE	FEB 13,80	APR 14,80	MAY 14,80	JUN 16,80
TIME	1430	1330	1515	1230
TOTAL CELLS/ML	440	78	190	570
DIVERSITY: DIVISION	0.6	0.0	0.8	0.5
.CLASS	0.6	0.0	0.8	0.5
..ORDER	1.0	0.0	0.8	0.9
...FAMILY	1.9	1.8	1.8	1.0
....GENUS	2.1	1.8	1.8	1.4

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...MICRACTINIACEAE								
....GOLENKINIA	10	2	--	-	--	-	--	-
....MICRACTINIUM	--	-	--	-	--	-	--	-
...OOCYSTACEAE								
....SELENASTRUM	--	-	--	-	--	-	--	-
....TREUBARIA	--	-	--	-	--	-	--	-
...SCENEDESMACEAE								
....ACTINASTRUM	--	-	--	-	--	-	--	-
....SCENEDESMUS	--	-	--	-	--	-	52	9
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	-	--	-	52#	27	13	2
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	46	10	--	-	--	-	430#	75
....MELOSIRA	--	-	--	-	--	-	39	7
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	--	-	39#	50	--	-	--	-
....COCCONEIS	--	-	--	-	--	-	13	2
....RHOICOSPHENIA	5	1	--	-	--	-	--	-
...DIATOMACEAE								
....DIATOMA	5	1	--	-	52#	27	--	-
...FRAGILARIACEAE								
....ASTERIONELLA	250#	57	13#	17	78#	40	--	-
....SYNEDRA	20	5	--	-	--	-	--	-
...NAVICULACEAE								
....NAVICULA	15	3	13#	17	--	-	13	2
...NITZSCHIACEAE								
....NITZSCHIA	51	12	13#	17	13	7	13	2
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....ANACYSTIS	--	-	--	-	--	-	--	-
..HORMOGONALES								
...NOSTOCACEAE								
....ANABAENA	35	8	--	-	--	-	--	-
...OSCILLATORIACEAE								
....OSCILLATORIA	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
¢ - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

14321000 UMPQUA RIVER NEAR ELKTON, OR--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

DATE	JUL 23,80		AUG 13,80		SEP 18,80	
TIME	1700		0000		1400	
TOTAL CELLS/ML	9400		4600		430	
DIVERSITY: DIVISION	1.0		1.4		0.5	
.CLASS	1.0		1.4		0.5	
..ORDER	1.0		2.0		1.1	
...FAMILY	1.3		2.1		1.1	
....GENUS	1.3		2.1		1.1	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)						
.CHLOROPHYCEAE						
..CHLOROCOCCALES						
...MICRACTINIACEAE						
....GOLENKINIA	490	5	--	-	--	-
....MICRACTINIUM	--	-	100	2	--	-
...OOCYSTACEAE						
....SELENASTRUM	81	1	--	-	--	-
....TREUBARIA	490	5	--	-	--	-
...SCENEDESMACEAE						
....ACTINASTRUM	--	-	270	6	--	-
....SCENEDESMUS	650	7	--	-	--	-
..VOLVOCALES						
...CHLAMYDOMONADACEAE						
....CHLAMYDOMONAS	81	1	100	2	13	3
CHRYSOPHYTA						
.BACILLARIOPHYCEAE						
..CENTRALES						
...COSCINODISCACEAE						
....CYCLOTELLA	7100#	76	1900#	40	13	3
....MELOSIRA	--	-	--	-	--	-
..PENNALES						
...ACHNANTHACEAE						
....ACHNANTHES	--	-	--	-	--	-
....COCCONEIS	--	-	--	-	--	-
....RHOICOSPHENIA	--	-	34	1	13	3
...CIATOMACEAE						
....DIATOMA	--	-	--	-	--	-
...FRAGILARIACEAE						
....ASTERIONELLA	--	-	--	-	--	-
....SYNEDRA	--	-	34	1	--	-
...NAVICULACEAE						
....NAVICULA	--	-	--	-	--	-
...NITZSCHIACEAE						
....NITZSCHIA	--	-	100	2	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)						
.CYANOPHYCEAE						
..CHROOCOCCALES						
...CHROCOCCACEAE						
....ANACYSTIS	490	5	1700#	36	52	12
..HORMOGONALES						
...NOSTOCACEAE						
....ANABAENA	--	-	--	-	--	-
...OSCILLATORIACEAE						
....OSCILLATORIA	--	-	440	9	340#	79

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

14321000 UMPQUA RIVER NEAR ELKTON, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	20.0	19.0	12.0	11.5	7.5	6.5	8.5	7.0	2.0	1.0	9.5	6.5
2	19.5	18.5	11.5	11.0	8.5	7.5	9.0	8.5	3.0	2.0	9.0	7.5
3	19.5	18.5	11.5	11.5	9.5	8.5	9.0	8.5	5.5	3.5	8.5	7.5
4	19.5	19.0	11.5	11.0	9.5	9.0	8.5	8.5	6.0	5.0	9.0	8.5
5	19.5	19.0	11.5	11.0	9.5	9.0	8.5	8.5	6.5	6.0	10.0	9.0
6	19.5	18.5	11.0	10.5	9.0	8.5	8.5	8.0	7.0	6.0	10.0	9.5
7	19.0	18.0	11.0	10.5	---	---	8.0	7.5	6.5	6.5	10.0	9.5
8	18.5	18.0	11.0	10.5	---	---	7.5	7.0	7.0	6.5	10.0	9.5
9	18.5	17.5	10.5	10.0	---	---	7.5	7.0	7.0	6.0	10.0	9.5
10	18.5	17.5	10.0	10.0	---	---	7.0	6.5	7.0	6.0	9.5	9.0
11	18.0	17.5	10.0	9.5	---	---	6.5	6.0	6.5	6.0	9.0	8.5
12	18.0	17.5	9.5	9.0	6.5	6.0	8.0	6.5	6.0	6.0	8.5	7.5
13	17.5	17.0	9.0	8.5	6.0	6.0	9.0	8.0	6.5	6.0	7.5	6.5
14	17.5	17.0	8.5	8.0	6.0	5.5	9.5	9.5	6.5	5.5	7.0	6.5
15	17.5	16.5	8.0	8.0	5.5	5.0	9.5	8.5	7.0	5.0	6.5	6.0
16	17.0	16.5	8.0	8.0	5.0	4.5	8.5	8.5	6.5	6.0	6.5	6.0
17	17.0	16.0	8.5	8.0	5.5	4.5	9.0	8.5	6.5	6.0	8.0	6.0
18	16.5	15.5	8.5	8.0	6.0	5.5	8.5	5.5	7.0	6.5	8.0	7.5
19	15.5	14.0	8.0	7.5	6.5	6.0	5.5	4.5	8.0	7.0	9.0	7.5
20	14.0	13.0	8.0	7.5	7.5	6.5	4.5	4.0	8.5	8.0	8.0	6.5
21	13.0	12.0	7.5	7.0	8.0	7.5	4.0	3.5	8.5	8.0	8.0	7.5
22	12.0	11.5	7.5	7.0	8.0	7.5	4.5	4.0	8.0	8.0	8.0	7.0
23	12.5	11.5	7.0	6.5	7.5	7.0	5.0	4.0	8.0	7.5	8.0	7.5
24	13.0	12.5	8.0	7.0	7.0	7.0	5.0	3.0	8.0	7.0	8.5	7.5
25	13.0	12.5	8.0	8.0	7.0	6.5	4.0	3.5	8.5	7.5	9.5	8.5
26	13.0	12.5	8.0	7.5	7.0	7.0	4.0	4.0	9.0	8.5	9.5	9.0
27	13.0	13.0	7.5	6.5	7.0	6.5	4.0	3.0	9.5	9.0	9.0	9.0
28	13.0	12.5	6.5	6.0	6.5	6.0	3.0	2.0	10.0	9.0	9.0	8.5
29	12.5	12.5	6.5	6.0	6.0	6.0	2.0	1.0	9.5	7.0	9.0	9.0
30	12.5	12.0	6.5	6.5	6.5	6.0	1.0	.5	---	---	9.0	8.5
31	12.0	11.5	---	---	7.0	6.0	1.0	.5	---	---	9.0	8.5
MONTH	20.0	11.5	12.0	6.0	9.5	4.5	9.5	.5	10.0	1.0	10.0	6.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.5	8.0	16.0	14.5	17.0	16.5	23.0	20.5	25.5	24.0	21.0	19.5
2	9.0	8.0	15.5	14.5	16.5	15.5	22.5	21.0	25.5	24.0	21.0	20.5
3	9.0	8.5	16.0	14.0	16.5	15.5	21.5	20.5	25.0	23.5	21.0	20.0
4	9.0	8.5	15.5	15.0	17.0	15.0	20.5	20.0	24.5	23.0	21.0	19.5
5	9.0	8.5	16.0	14.5	16.0	15.5	20.0	19.0	24.5	23.0	21.5	20.0
6	9.0	8.5	17.0	15.5	15.5	14.5	21.5	19.0	23.5	22.5	21.0	20.5
7	9.0	8.5	17.0	15.0	15.0	14.0	22.5	20.0	24.0	22.5	21.0	20.5
8	9.0	8.5	16.5	16.0	16.0	14.5	22.0	21.0	24.0	22.5	21.0	19.5
9	9.0	8.5	16.0	15.0	17.5	15.5	21.0	20.0	24.5	22.5	21.5	20.0
10	9.5	8.5	15.0	14.0	17.5	16.5	22.0	20.0	24.5	23.5	22.0	21.0
11	10.0	9.0	14.0	13.0	18.0	17.0	23.0	21.0	24.5	23.5	22.5	21.0
12	11.0	9.5	13.0	12.5	18.0	17.0	23.0	21.5	24.0	23.0	22.0	21.0
13	12.5	10.5	12.5	12.0	18.0	17.0	23.5	21.5	24.0	23.0	21.0	19.5
14	12.5	11.5	12.5	11.5	17.0	16.5	23.5	22.0	23.0	22.5	19.5	18.5
15	12.5	11.0	13.5	12.0	18.5	16.5	24.5	22.0	23.0	22.0	19.5	18.5
16	13.0	11.0	14.5	12.5	18.5	17.0	25.0	23.0	23.5	22.0	20.0	18.5
17	13.0	12.0	16.5	13.5	18.5	16.5	25.0	23.5	23.5	22.0	20.0	19.0
18	13.5	12.5	17.0	15.0	20.0	17.5	25.0	23.5	23.0	22.0	20.0	19.0
19	13.5	13.0	17.5	15.5	20.5	19.0	25.5	23.5	22.5	21.0	19.0	18.5
20	13.5	12.5	19.0	16.5	20.5	19.5	26.0	24.0	22.5	21.5	18.5	18.0
21	12.5	11.0	18.5	18.0	20.5	19.5	27.0	25.0	22.5	21.5	18.0	17.5
22	11.0	10.5	18.0	16.5	20.5	19.0	27.0	25.0	22.5	21.5	18.0	16.5
23	11.5	10.0	17.0	16.0	20.0	19.0	25.5	24.0	22.5	21.5	18.0	17.0
24	12.0	10.5	16.5	15.5	19.5	19.0	25.5	24.0	22.5	21.5	18.5	17.0
25	13.5	12.0	15.5	14.5	19.0	18.5	25.5	24.0	22.0	21.0	19.0	17.5
26	14.0	12.5	15.0	14.0	19.5	18.0	26.0	24.5	22.0	21.0	19.0	18.0
27	15.0	13.5	14.5	13.5	20.5	18.0	26.5	24.5	21.5	21.0	18.5	18.0
28	15.5	15.0	16.0	13.5	21.5	19.0	27.0	25.0	21.5	20.5	19.0	18.0
29	15.5	14.5	16.5	15.0	22.0	20.0	26.5	25.0	21.5	20.5	19.0	18.0
30	15.5	14.5	17.0	16.0	22.5	20.0	26.0	24.5	21.0	20.0	19.5	18.5
31	---	---	17.5	16.0	---	---	26.0	24.5	20.5	20.0	---	---
MONTH	15.5	8.0	19.0	11.5	22.5	14.0	27.0	19.0	25.5	20.0	22.5	16.5

14322800 ELK CREEK NEAR ELKTON, OR

LOCATION.--Lat 43°39'32", long 123°32'59", in SW¼NE¼ sec.17, T.22 S., R.7 W., Douglas County, Hydrologic Unit 17100303, at county road's end, 1.6 mi (2.6 km) northeast of Elkton, and at mile 2.5 (4.0 km).

DRAINAGE AREA.--291 mi^2 (754 km^2).

PERIOD OF RECORD.--Chemical analyses: October 1978 to September 1980 (discontinued).

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	PH FIELD (UNITS)	OXYGEN, DIS-SOLVED (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SILICA, DIS-SOLVED (MG/L AS SIO2)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
FEB , 1980									
27...	0915	700	9.8	6.8	11.0	79	15	6.6	2.5
MAR									
14...	0915	--	8.4	7.2	11.8	55	13	5.1	1.9
AUG									
25...	1000	--	17.2	7.9	--	140	.4	9.8	3.7

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)
FEB , 1980									
27...	4.7	.6	26	1.9	5.3	.1	.19	.32	.010
MAR									
14...	3.9	.9	16	1.3	3.5	.0	.25	1.3	.010
AUG									
25...	9.9	.9	34	.1	18	.1	.00	.55	.010

DATE	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
FEB , 1980								
27...	.060	1.9	27	1	53	112	15	28
MAR								
14...	.300	17	21	5	40	--	434	--
AUG								
25...	.030	4.3	40	6	63	--	--	--

14322860 PARADISE CREEK NEAR ELKTON, OR

LOCATION.--Lat 43°40'19", long 123°38'38", in SE¼NE¼ sec.9, T.22 S., R.8 W., Douglas County, Hydrologic Unit 17100303, at mouth on State Highway 38, 4.7 mi (7.6 km) northwest of Elkton.

DRAINAGE AREA.--19.5 mi² (50.5 km²).

PERIOD OF RECORD.--Chemical analyses: October 1978 to September 1980 (discontinued).

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	PH FIELD (UNITS)	OXYGEN, DIS-SOLVED (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SILICA, DIS-SOLVED (MG/L AS SIO2)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
FEB , 1980									
27...	1130	42	9.7	6.7	11.6	53	13	3.8	1.6
MAR									
14...	1040	750	8.5	7.0	11.6	43	12	3.4	1.2
AUG									
25...	1105	1.1	18.4	7.6	--	108	6.4	8.2	2.9

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)
FEB , 1980									
27...	4.2	.7	18	1.0	3.2	.0	.15	.25	.000
MAR									
14...	3.5	.9	11	.2	3.0	.0	.39	1.3	.010
AUG									
25...	6.9	2.2	43	2.4	6.2	.1	.26	.69	.040

DATE	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
FEB , 1980								
27...	.010	1.7	16	0	39	3.86	4	.45
MAR								
14...	.130	6.4	13	2	33	93.1	--	--
AUG								
25...	.120	6.2	32	0	62	.21	--	--

14322880 WEATHERLY CREEK NEAR SCOTTSBURG, OR

LOCATION.--Lat 43°40'07", long 123°43'45", in NW¼SE¼ sec.11, T.22 S., R.9 W., Douglas County, Hydrologic Unit 17100303, 0.6 mi (1.0 km) upstream from mouth and 4.6 mi (7.4 km) east of Scottsburg.

DRAINAGE AREA.--12.6 mi² (32.6 km²).

PERIOD OF RECORD.--Chemical analyses: October 1978 to September 1980 (discontinued).

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	PH FIELD (UNITS)	OXYGEN, DIS-SOLVED (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SILICA, DIS-SOLVED (MG/L AS SIO2)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
FEB , 1980									
27...	1220	80	9.9	6.4	11.4	54	11	3.6	1.3
MAR									
14...	1115	640	8.5	6.9	11.5	42	10	3.2	1.2
AUG									
25...	1148	--	13.3	7.2	--	94	11	6.4	2.0

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)
FEB , 1980									
27...	4.6	.7	15	1.8	3.5	.0	.23	.31	.010
MAR									
14...	4.0	.8	10	.6	3.5	.0	.43	.62	.010
AUG									
25...	7.3	1.3	34	1.8	6.5	.1	.06	.66	.030

DATE	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
FEB , 1980								
27...	.010	2.3	14	0	37	6.26	4	.86
MAR								
14...	.130	6.3	13	3	31	74.3	--	--
AUG								
25...	.050	3.4	24	0	57	--	--	--

14323030 MILL CREEK NEAR SCOTTSBURG, OR

LOCATION.--Lat 43°45'47", long 123°51°57", in NE¼SE¼ sec.22, T.22 S., R.10 W., Douglas County, Hydrologic Unit 17100303, 100 ft (30 m) downstream from Footlog Creek and 2.5 mi (4.0 km) west of Scottsburg.

DRAINAGE AREA.--133 mi² (344 km²).

PERIOD OF RECORD.--Chemical analyses: October 1978 to September 1980 (discontinued).

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	PH FIELD (UNITS)	OXYGEN, DIS-SOLVED (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SILICA, DIS-SOLVED (MG/L AS SIO2)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
FEB , 1980									
27...	1310	680	9.6	6.5	11.7	44	10	3.1	1.2
MAR									
14...	1210	5050	8.8	7.1	11.7	44	9.5	3.1	1.2
AUG									
25...	1230	9.0	18.0	7.1	--	72	7.5	6.0	2.1

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)
FEB , 1980									
27...	4.9	.7	12	2.1	3.6	.0	.34	.20	.000
MAR									
14...	4.1	1.1	12	2.9	3.9	.0	.34	.79	.000
AUG									
25...	5.6	1.1	25	1.4	4.3	.1	.00	.55	.000

DATE	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
FEB , 1980								
27...	.020	1.5	13	1	34	45.9	--	--
MAR								
14...	.110	4.1	13	1	35	600	98	1340
AUG								
25...	.030	2.7	24	0	43	.80	--	--

14323070 DEAN CREEK NEAR REEDSPORT, OR

LOCATION.--Lat 43°30'18", long 123°59'30", in NW¼NE¼ sec.10, T.22 S., R.11 W., Douglas County, Hydrologic Unit 17100303, 50 ft (15 m) downstream from Johnson Creek and 5.5 mi (8.8 km) east of Reedsport.

DRAINAGE AREA.--10.9 mi² (28.2 km²).

PERIOD OF RECORD.--Chemical analyses: October 1978 to September 1980 (discontinued).

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	PH FIELD (UNITS)	OXYGEN, DIS-SOLVED (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SILICA, DIS-SOLVED (MG/L AS SIO2)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
FEB , 1980									
27...	1340	--	10.5	6.5	11.0	48	9.3	3.0	1.1
MAR									
14...	1245	900	8.4	6.9	11.3	40	9.0	2.9	1.0
AUG									
25...	1340	1.6	19.9	6.4	--	59	11	3.5	1.2

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)
FEB , 1980									
27...	4.9	.5	10	.6	4.6	.0	.58	.37	.000
MAR									
14...	4.7	.6	5	.7	4.5	.0	1.5	.58	.010
AUG									
25...	5.5	.7	18	3.8	5.9	.1	.00	.30	.000

DATE	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
FEB , 1980								
27...	.000	--	12	2	33	--	11	--
MAR								
14...	.070	5.1	11	6	33	97.2	210	510
AUG								
25...	.030	2.4	14	0	43	.16	--	--

14323080 SCHOLFIELD CREEK NEAR REEDSPORT, OR

LOCATION.--Lat 43°39'45", long 124°05'17", in SE¼NE¼ sec.14, T.22 S., R.12 W., Douglas County, Hydrologic Unit 17100303, at bridge on Scholfield Road 2.9 mi (4.7 km) south of Reedsport.

DRAINAGE AREA.--12.9 mi² (33.4 km²).

PERIOD OF RECORD.--Chemical analyses: October 1978 to September 1980 (discontinued).

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	PH FIELD (UNITS)	OXYGEN, DIS-SOLVED (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SILICA, DIS-SOLVED (MG/L AS SIO2)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)
FEB , 1980												
27...	1430	72	10.3	6.4	10.3	73	13	3.5	1.4	6.0	.6	11
MAR												
14...	1320	365	9.4	6.8	10.3	51	11	3.1	1.3	5.4	1.0	8
AUG												
25...	1430	7.2	15.2	6.1	--	95	13	6.4	2.2	7.5	1.3	34

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)
FEB , 1980												
27...	.6	5.5	.0	1.3	.44	.000	.010	3.8	15	4	43	6.61
MAR												
14...	2.7	5.0	.0	.67	.64	.000	.050	4.7	13	5	37	51.2
AUG												
25...	.2	8.3	.1	.09	.69	.000	.060	5.5	25	0	60	1.26

14323100 SMITH RIVER NEAR GARDINER, OR

LOCATION.--Lat 43°47'05", long 123°48'50", in SW¼SE¼ sec.31, T.20 S., R.9 W., Douglas County, on right bank 0.1 mi (0.2 km) downstream from Buck Creek, 15 mi (24 km) northeast of Gardiner, and at mile 28.5 (45.9 km).

DRAINAGE AREA.--206 mi² (534 km²), at cableway site 0.2 mi (0.3 km) downstream.

PERIOD OF RECORD.--Water discharge: October 1965 to June 1973.
Chemical analyses: October 1978 to September 1980 (discontinued).

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	PH FIELD (UNITS)	OXYGEN, DIS-SOLVED (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SILICA, DIS-SOLVED (MG/L AS SIO2)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
FEB , 1980									
27...	1720	840	10.0	6.6	11.3	35	11	2.8	.8
MAR									
14...	1605	5900	8.5	6.9	11.7	37	10	2.9	1.0
AUG									
25...	1630	1.0	22.2	7.8	--	64	6.2	3.9	1.5

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)
FEB , 1980									
27...	5.2	.7	12	1.0	3.4	.0	.24	.36	.020
MAR									
14...	3.4	.8	9	.4	2.8	.0	.41	.93	.000
AUG									
25...	5.4	1.1	24	.1	7.1	.1	.00	.68	.000

DATE	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
FEB , 1980								
27...	.020	--	10	0	33	68.0	4	9.1
MAR								
14...	.130	9.3	11	2	29	573	--	--
AUG								
25...	.030	3.4	16	0	40	.11	--	--

14323140 NORTH FORK SMITH RIVER NEAR GARDINER, OR

LOCATION.--Lat 43°48'21", long 123°55'55", in SW¼NE¼ sec.30, T.20 S., R.10 W., Douglas County, Hydrologic Unit 17100303, 1.4 mi (2.3 km) upstream from North Fork Bridge on Smith River Road, and 10 mi (16 km) northeast of Gardiner.

DRAINAGE AREA.--59.9 mi² (155.1 km²).

PERIOD OF RECORD.--Chemical analyses: October 1978 to September 1980 (discontinued).

WATER QUALITY DATA

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	PH FIELD (UNITS)	OXYGEN, DIS-SOLVED (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SILICA, DIS-SOLVED (MG/L AS SIO2)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
FEB , 1980									
27...	1630	90	10.1	6.6	11.3	57	8.6	2.4	1.0
MAR									
14...	1505	--	8.0	6.9	11.8	33	7.6	2.2	.8
AUG									
25...	1530	28	19.6	7.1	--	52	6.5	3.1	1.0

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)
FEB , 1980									
27...	5.0	.5	8	.8	4.0	.0	.50	.40	.000
MAR									
14...	3.1	.6	2	.9	3.8	.0	.58	.57	.000
AUG									
25...	4.8	.8	16	.1	5.2	.1	.00	.64	.000

DATE	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER DAY)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
FEB , 1980								
27...	.010	1.2	10	2	29	5.59	6	1.5
MAR								
14...	.080	4.8	9	7	23	--	--	--
AUG								
25...	.030	2.1	12	0	31	2.65	--	--

14324500 WEST FORK MILLICOMA RIVER NEAR ALLEGANY, OR

LOCATION.--Lat 43°28'35", long 124°03'20", in SW¼NW¼ sec.19, T.24 S., R.11 W., Coos County, Hydrologic Unit 17100304, on left bank at highway bridge, 40 ft (12 m) upstream from Daggett Creek, 3.8 mi (6.1 km) north of Allegany, and at mile 6.82 (10.97 km).

DRAINAGE AREA.--46.9 mi² (121.5 km²), at cableway 300 ft (91 m) downstream.

PERIOD OF RECORD.--September 1954 to current year.

REVISED RECORDS.--WSP 1718: 1955-59. WRD Oreg. 1973: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 76.95 ft (23.454 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. No regulation. Only minor diversions for irrigation above station.

AVERAGE DISCHARGE.--26 years, 252 ft³/s (7.137 m³/s), 72.97 in/yr (1,853 mm/yr), 182,600 acre-ft/yr (225 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,100 ft³/s (229 m³/s) Nov. 24, 1960, gage height, 15.86 ft (4.834 m); minimum, 1.8 ft³/s (0.051 m³/s) Sept. 5, 9, 1965, Sept. 8-10, 1967.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in January or November 1953 reached a stage of about 17.9 ft (5.46 m), from information by local resident.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,000 ft³/s (85.0 m³/s) and maximum discharge, 3,020 ft³/s (85.5 m³/s) Dec. 2, gage height, 8.74 ft (2.664 m); minimum, 4.6 ft³/s (0.13 m³/s) Oct. 12-15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	285	170	442	85	230	160	99	57	30	11	7.4
2	5.8	183	1730	372	100	195	140	91	64	29	11	8.8
3	5.8	140	1420	344	170	170	130	83	101	29	11	8.8
4	5.8	170	1240	306	140	170	150	76	95	40	11	9.6
5	5.6	398	892	739	110	159	300	72	80	41	11	8.1
6	5.3	295	494	561	130	146	600	68	76	33	11	7.4
7	5.3	192	330	354	120	132	440	62	93	29	10	7.1
8	5.3	146	242	292	110	122	360	57	85	27	10	6.7
9	5.3	112	202	387	110	108	650	70	76	27	9.6	6.4
10	5.1	93	227	728	100	106	500	68	68	25	9.6	6.4
11	4.8	80	192	459	90	192	400	57	62	24	9.2	6.1
12	4.8	70	176	1340	85	239	300	54	57	23	8.8	5.8
13	4.8	62	163	1770	80	859	250	51	70	22	8.1	6.1
14	4.8	56	151	1770	75	1850	260	46	95	22	8.1	6.4
15	5.1	51	135	1140	76	917	280	44	82	21	8.1	6.4
16	5.3	72	120	713	72	615	200	41	72	20	8.1	6.4
17	5.1	155	127	606	76	481	180	39	64	18	8.1	6.1
18	8.1	430	261	434	242	663	160	37	56	17	8.8	6.1
19	159	663	410	323	811	485	161	35	49	17	9.2	7.4
20	275	337	521	252	565	430	310	33	45	17	9.2	15
21	207	214	1170	207	391	463	912	33	42	16	8.4	20
22	125	459	936	179	503	351	557	42	40	15	7.7	14
23	115	780	703	157	583	268	351	66	39	15	7.4	11
24	108	1330	969	140	387	217	281	85	41	15	7.4	9.2
25	410	903	592	127	303	185	222	157	49	14	7.1	8.1
26	317	780	387	112	365	160	188	157	57	14	7.1	7.7
27	233	548	288	103	344	150	163	117	48	14	7.1	7.4
28	225	365	225	91	320	140	146	91	40	13	7.4	7.4
29	207	258	188	87	281	120	127	76	35	12	7.1	7.4
30	199	204	188	85	---	120	112	66	32	12	7.1	7.4
31	463	---	227	85	---	140	---	57	---	11	7.4	---
TOTAL	3141.2	9831	15076	14705	6824	10583	8990	2130	1870	662	272.1	248.1
MEAN	101	328	486	474	235	341	300	68.7	62.3	21.4	8.78	8.27
MAX	463	1330	1730	1770	811	1850	912	157	101	41	11	20
MIN	4.8	51	120	85	72	106	112	33	32	11	7.1	5.8
CFSM	2.15	6.99	10.4	10.1	5.01	7.27	6.40	1.47	1.33	.46	.19	.18
IN.	2.49	7.80	11.96	11.66	5.41	8.39	7.13	1.69	1.48	.53	.22	.20
AC-FT	6230	19500	29900	29170	13540	20990	17830	4220	3710	1310	540	492

CAL YR 1979 TOTAL 82045.3 MEAN 225 MAX 2480 MIN 4.8 CFSM 4.80 IN 65.08 AC-FT 162700
WTR YR 1980 TOTAL 74332.4 MEAN 203 MAX 1850 MIN 4.8 CFSM 4.33 IN 58.96 AC-FT 147400

14324580 PONY CREEK AT COOS BAY, OR

LOCATION.--Lat 43°22'50", long 124°14'24", in SE¼SE¼ sec.21, T.25 S., R.13 W., Coos County, Hydrologic Unit 17100304, at Ocean Boulevard in town of Coos Bay, 250 ft (76 m) below Lower Pony Creek Dam, and at mile 2.2 (3.5 km).

DRAINAGE AREA.--3.90 mi² (10.1 km²).

PERIOD OF RECORD.--July 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is 12.23 ft (3.728 m) National Geodetic Vertical Datum of 1929 (Coos Bay-North Bend Water Board bench mark).

REMARKS.--Records good. Flow regulated by Upper and Lower Pony Creek Reservoirs (see stations 14324550 and 14324560) and diversion above station from Lower Pony Creek Reservoir to municipal water supply of Coos Bay-North Bend (station 14323570). Approximately 4.6 ft³/s (0.13 m³/s) is diverted to the Coos Bay-North Bend water treatment plant, maximum capacity, 10.8 ft³/s (0.31 m³/s).

AVERAGE DISCHARGE.--5 years, 8.83 ft³/s (0.250 m³/s), 30.75 in/yr (781 mm/yr), 6,400 acre-ft/yr (7.89 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 89 ft³/s (2.52 m³/s) Feb. 7, 1978, gage height, 4.79 ft (1.460 m); minimum, 0.01 ft³/s (0.001 m³/s) Feb. 11-20, Apr. 27, 29, May 12, 13, June 5, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 70 ft³/s (1.98 m³/s) Dec. 21, gage height, 4.41 ft (1.344 m); minimum, 0.02 ft³/s (0.001 m³/s) Jan. 31, Feb. 1.

MONTHLY DISCHARGE OF PONY CREEK, PONY CREEK DIVERSION AND MONTHLY CHANGE IN CONTENTS OF RESERVOIRS NEAR COOS BAY, OR, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Runoff in acre-feet

	14324580 Pony Creek at Coos Bay	14324570 Diversion from Lower Pony Cr. Reservoir to City of Coos Bay	14324560 Lower Pony Creek Reservoir Change in Contents	14324550 Upper Pony Creek Reservoir Change in Contents	Pony Creek flow adjusted for Regulation and Diversion	Runoff in Inches
October	3.3	343	-24	-20	302	1.45
November	51	312	+26	+330	719	3.46
December	744	272	+11	+340	1,370	6.59
CAL YR 1979	2,550	3,860	+165	+640	7,220	34.72
January	934	362	-227	-30	1,040	5.00
February	308	271	+18	+180	777	3.74
March	771	257	-3	-170	855	4.11
April	388	139	+115	+190	832	4.00
May	27	349	+86	+30	492	2.37
June	71	282	-5	-10	338	1.63
July	2.3	387	-31	-150	208	1.00
August	2.9	400	+62	-240	225	1.08
September	3.2	400	-37	-250	116	.56
WTR YR 1980	3,310	3,770	-9	+200	7,270	34.96

14324580 PONY CREEK AT COOS BAY, OR--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	.06	.06	13	.04	14	6.1	.06	.30	.04	.04	.07
2	.05	.05	6.5	12	.03	15	5.1	.06	1.4	.04	.03	.07
3	.05	.06	7.5	12	2.2	15	4.7	.04	2.8	.04	.04	.07
4	.05	.07	10	11	4.7	12	.05	.04	2.1	.05	.04	.08
5	.05	.06	6.1	13	5.5	11	.35	.04	.90	.04	.04	.08
6	.05	.06	3.5	13	5.1	11	4.7	.04	.95	.04	.04	.08
7	.05	.06	1.9	12	4.4	10	1.8	.04	2.4	.04	.04	.08
8	.05	.06	1.2	11	4.9	10	.07	.04	3.1	.04	.05	.07
9	.05	.05	1.3	11	4.7	10	4.1	.05	2.6	.04	.07	.06
10	.05	.05	2.4	11	5.3	11	.06	.05	1.8	.04	.08	.06
11	.05	.05	8.1	11	4.5	11	.06	.06	2.2	.04	.08	.06
12	.05	.05	12	18	4.5	11	.05	.06	.95	.04	.05	.07
13	.05	.05	12	17	4.5	16	.05	.07	1.3	.04	.04	.07
14	.05	.05	11	17	4.2	17	.06	.07	4.7	.04	.04	.04
15	.05	.05	11	14	4.4	15	4.1	.08	3.8	.04	.04	.04
16	.05	.07	11	17	3.1	14	13	.08	3.5	.03	.04	.04
17	.05	.07	13	22	6.5	15	17	.07	.63	.03	.04	.04
18	.06	1.6	12	19	7.7	14	17	.06	.06	.03	.04	.04
19	.06	3.5	13	19	9.6	13	4.1	.06	.05	.04	.04	.04
20	.06	.17	15	18	5.9	14	.09	.06	.05	.04	.04	.05
21	.05	.06	39	34	5.7	12	4.7	.07	.05	.04	.04	.04
22	.06	.67	52	49	6.7	12	9.4	.07	.04	.04	.04	.04
23	.06	3.0	51	44	7.2	13	21	.08	.05	.04	.04	.04
24	.07	5.3	26	24	6.5	12	20	.09	.05	.03	.04	.04
25	.06	4.5	15	5.9	6.7	12	19	.12	.05	.04	.04	.04
26	.06	3.8	15	8.4	7.9	12	18	4.1	.05	.04	.04	.04
27	.06	1.4	5.3	8.6	7.5	12	17	3.5	.04	.03	.05	.04
28	.06	.58	.06	5.7	5.3	12	3.8	2.4	.04	.03	.04	.04
29	.05	.18	.05	.05	10	11	.05	2.1	.04	.03	.06	.04
30	.06	.06	.11	.03	---	12	.05	.11	.04	.03	.06	.04
31	.06	---	13	.03	---	9.8	---	.07	---	.03	.07	---
TOTAL	1.68	25.79	375.08	470.71	155.27	388.8	195.54	13.84	36.04	1.16	1.44	1.61
MEAN	.054	.86	12.1	15.2	5.35	12.5	6.52	.45	1.20	.037	.046	.054
MAX	.07	5.3	52	49	10	17	21	4.1	4.7	.05	.08	.08
MIN	.05	.05	.05	.03	.03	9.8	.05	.04	.04	.03	.03	.04
AC-FT	3.3	51	744	934	308	771	388	27	71	2.3	2.9	3.2

CAL YR 1979 TOTAL 1286.23 MEAN 3.52 MAX 52 MIN .02 AC-FT 2550
WTR YR 1980 TOTAL 1666.96 MEAN 4.55 MAX 52 MIN .03 AC-FT 3310

14325000 SOUTH FORK COQUILLE RIVER AT POWERS, OR

LOCATION.--Lat 42°53'30", long 124°04'10", in SE¼ sec.12, T.31 S., R.12 W., Coos County, Hydrologic Unit 17100305, on left bank 0.6 mi (1.0 km) downstream from highway bridge at Powers, 0.9 mi (1.4 km) upstream from Woodward Creek, and at mile 64.5 (103.8 km).

DRAINAGE AREA.--169 mi² (438 km²).

PERIOD OF RECORD.--September 1916 to September 1926, October 1928 to current year.

REVISED RECORDS.--WSP 1184: 1946(M). WSP 1448: 1917-18(M), 1919, 1920(M), 1925.

GAGE.--Water-stage recorder. Datum of gage is 197.42 ft (60.274 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 17, 1938, nonrecording gage at various sites within 1 mi (2 km) of present site at different datums.

REMARKS.--Records good. No regulation. Small diversions for irrigation above station.

AVERAGE DISCHARGE.--61 years (water years 1917-26, 1930-80), 784 ft³/s (22.20 m³/s), 63.00 in/yr (1,600 mm/yr), 568,000 acre-ft/yr (700 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48,900 ft³/s (1,380 m³/s) Dec. 22, 1964, gage height, 26.51 ft (8.080 m), from floodmarks, from rating curve extended above 19,000 ft³/s (538 m³/s) on basis of contracted-opening measurement at gage height 18.14 ft (5.529 m) and slope-area measurement of peak flow; minimum, 12 ft³/s (0.34 m³/s) Sept. 22-25, 27-30, 1939, Oct. 5, 1961, Oct. 16-20, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 9,300 ft³/s (263 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 12	1900	*15,700	445	*13.01	3.965	Mar. 14	0500	10,300	292	10.31	2.142

Minimum, 20 ft³/s (0.57 m³/s) Oct. 13, Sept. 27-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	392	578	2760	309	1090	751	443	319	117	48	32
2	23	334	2700	1960	342	877	668	401	327	112	48	32
3	23	294	4880	1430	673	734	615	372	338	107	48	35
4	22	338	2520	1130	494	657	652	342	342	107	48	35
5	22	890	2100	1390	421	626	1150	316	330	110	47	32
6	22	763	1430	1300	470	631	2480	298	305	103	45	32
7	22	641	1060	1060	434	556	1940	280	291	94	44	31
8	22	474	816	884	392	494	1490	267	264	92	42	32
9	22	376	668	846	357	451	2830	342	244	92	41	31
10	22	312	641	1020	327	417	2800	365	227	88	41	29
11	22	267	535	1040	305	546	1910	319	212	84	38	27
12	22	231	465	11200	287	620	1350	298	212	80	37	25
13	21	202	413	13500	270	2560	1040	280	223	76	36	25
14	22	178	376	7370	254	7020	1090	270	220	75	37	27
15	22	163	342	4300	241	3070	1080	254	198	73	37	26
16	22	241	316	3260	231	1930	852	238	185	69	35	25
17	22	323	294	3090	251	1580	712	220	178	68	35	24
18	23	706	380	2160	816	2030	605	205	166	65	36	25
19	330	989	1260	1550	1510	1770	540	195	157	63	37	27
20	684	695	1380	1200	1250	1580	840	181	148	62	35	29
21	589	525	3590	962	949	1610	3040	178	142	60	35	31
22	305	1550	2950	786	1960	1390	2470	195	140	59	33	29
23	309	2750	2640	663	2400	1220	1680	241	137	57	32	25
24	342	5050	3080	572	1470	1040	1340	489	134	57	32	24
25	1890	2450	2020	504	1240	897	1090	877	178	53	33	22
26	1020	1680	1420	451	1530	780	890	810	212	53	33	22
27	740	1210	1090	409	1570	746	746	641	166	51	32	21
28	578	909	871	372	1720	663	641	514	145	50	32	21
29	460	746	734	342	1390	600	567	425	134	48	32	21
30	392	657	1920	323	---	551	494	376	124	48	32	21
31	443	---	3840	312	---	594	---	334	---	47	32	---
TOTAL	8482	26336	47309	68146	23863	39330	38353	10966	6398	2320	1173	818
MEAN	274	878	1526	2198	823	1269	1278	354	213	74.8	37.8	27.3
MAX	1890	5050	4880	13500	2400	7020	3040	877	342	117	48	35
MIN	21	163	294	312	231	417	494	178	124	47	32	21
CFSM	1.62	5.20	9.03	13.0	4.87	7.51	7.56	2.10	1.26	.44	.22	.16
IN.	1.87	5.80	10.41	15.00	5.25	8.66	8.44	2.41	1.41	.51	.26	.18
AC-FT	16820	52240	93840	135200	47330	78010	76070	21750	12690	4600	2330	1620

CAL YR 1979 TOTAL 262085 MEAN 718 MAX 6130 MIN 21 CFSM 4.25 IN 57.69 AC-FT 519800
WTR YR 1980 TOTAL 273494 MEAN 747 MAX 13500 MIN 21 CFSM 4.42 IN 60.20 AC-FT 542500

14326800 NORTH FORK COQUILLE RIVER NEAR FAIRVIEW, OR

LOCATION.--Lat 43°11'03", long 124°04'33", in SW¼SE¼ sec.35, T.27 S., R.12 W., Coos County, Hydrologic Unit 17100305, on right bank 0.2 mi (0.3 km) downstream from Lost Creek, 2.2 mi (3.5 km) south of Fairview, and at mile 22.2 (35.7 km).

DRAINAGE AREA.--73.9 mi² (191.4 km²).

PERIOD OF RECORD.--October 1963 to current year.

REVISED RECORDS.--WRD Oreg. 1972: 1964-67, 1969-71(M,P).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 79.72 ft (24.299 m) National Geodetic Vertical Datum of 1929 (from stadia survey). Prior to Aug. 17, 1978, at site 0.5 mi (0.8 km) downstream at datum 16.38 ft (4.993 m) lower with supplementary water-stage recorder and crest-stage gage at present site used during periods of backwater.

REMARKS.--Records good except those for period of no gage-height record Dec. 20 to Feb. 14 and those below 200 ft³/s (5.66 m³/s), which are fair. No regulation. Several diversions for irrigation above station.

AVERAGE DISCHARGE.--17 years, 287 ft³/s (8.123 m³/s), 52.67 in/yr (1,338 mm/yr), 207,900 acre-ft/yr (256 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,760 ft³/s (220 m³/s) Mar. 2, 1972; maximum gage height, 18.80 ft (5.730 m), present site and datum, Jan. 8, 1976, backwater from ponding in valley below; maximum gage height unaffected by backwater, 18.03 ft (5.496 m), present site and datum, Jan. 8, 1976; minimum discharge, 2.0 ft³/s (0.057 m³/s) Sept. 9, 10, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum recorded discharge, 2,960 ft³/s (83.8 m³/s) Dec. 2, gage height, 9.58 ft (2.920 m), but may have been higher Jan. 13, no peak above base of 3,000 ft³/s (85.0 m³/s); minimum, 3.5 ft³/s (0.099 m³/s) Sept. 17, 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	195	211	700	100	250	256	173	67	37	11	5.4
2	6.2	114	1670	600	110	228	211	154	72	35	11	5.3
3	6.2	82	1700	550	190	211	190	143	79	34	11	6.3
4	6.0	114	1560	450	160	220	193	129	70	44	9.8	6.3
5	5.7	298	1270	700	130	214	253	122	64	45	9.3	5.8
6	6.0	198	709	600	150	217	505	111	64	38	8.8	5.5
7	6.3	132	513	400	140	198	517	104	109	34	8.4	6.2
8	5.8	95	398	340	130	186	456	97	105	32	8.4	6.8
9	5.4	75	326	600	130	166	665	127	95	31	8.4	5.3
10	5.4	64	330	850	120	160	634	132	85	31	8.0	4.3
11	4.8	56	276	550	110	231	505	106	80	27	7.2	4.2
12	4.6	51	243	1400	105	260	398	97	70	25	7.2	4.1
13	5.3	46	217	2000	100	766	340	88	80	25	6.7	4.5
14	5.8	43	200	1800	95	1710	326	82	90	24	6.8	5.4
15	6.2	40	183	1500	91	1160	330	77	110	23	7.0	5.1
16	6.2	51	166	1000	88	813	283	72	90	21	6.5	5.3
17	6.3	124	163	750	95	655	240	67	80	21	6.7	3.9
18	7.6	354	289	600	160	834	222	64	70	20	7.0	4.2
19	67	496	451	440	350	650	217	61	65	19	8.0	4.2
20	122	289	500	340	310	553	447	58	55	18	7.4	9.8
21	93	198	1300	260	273	500	1170	55	50	17	6.8	14
22	49	430	1000	220	609	418	748	65	48	16	6.3	11
23	38	709	900	200	720	354	535	82	46	16	5.8	8.2
24	36	1090	1100	180	464	307	451	132	48	15	5.8	7.4
25	176	760	700	170	372	276	368	180	58	14	5.4	6.5
26	127	676	400	150	390	263	310	160	62	13	5.4	5.8
27	117	500	380	130	333	247	270	119	51	12	4.5	5.5
28	127	379	340	120	307	217	237	97	45	11	5.5	6.0
29	122	301	280	110	280	198	211	84	41	11	5.1	5.8
30	93	250	340	100	---	180	193	77	38	11	4.8	5.5
31	292	---	800	95	---	203	---	70	---	11	5.3	---
TOTAL	1565.0	8210	18915	17905	6612	12845	11681	3185	2087	731	225.3	183.6
MEAN	50.5	274	610	578	228	414	389	103	69.6	23.6	7.27	6.12
MAX	292	1090	1700	2000	720	1710	1170	180	110	45	11	14
MIN	4.6	40	163	95	88	160	190	55	38	11	4.5	3.9
CFSM	.68	3.70	8.24	7.81	3.08	5.60	5.26	1.39	.94	.32	.10	.08
IN.	.79	4.13	9.51	9.00	3.32	6.46	5.87	1.60	1.05	.37	.11	.09
AC-FT	3100	16280	37520	35510	13110	25480	23170	6320	4140	1450	447	364

CAL YR 1979 TOTAL 95055.7 MEAN 260 MAX 1930 MIN 3.6 CFSM 3.51 IN 47.78 AC-FT 188500
WTR YR 1980 TOTAL 84144.9 MEAN 230 MAX 2000 MIN 3.9 CFSM 3.11 IN 42.30 AC-FT 166900

14328000 ROGUE RIVER ABOVE PROSPECT, OR

LOCATION.--Lat 42°46'30", long 122°29'55", in SE¼NE¼ sec.19, T.32 S., R.3 E., Jackson County, Hydrologic Unit 17100307, Rogue River National Forest, on left bank 1.4 mi (2.3 km) upstream from Pacific Power and Light Co. diversion dam, 1.8 mi (2.9 km) northwest of Prospect, and at mile 173.4 (279.0 km).

DRAINAGE AREA.--312 mi^2 (808 km^2).

PERIOD OF RECORD.--January 1908 to February 1912, October 1923 to current year. Monthly discharge only for some periods, published in WSP 1318. Prior to October 1925, published as "near Prospect."

REVISED RECORDS.--WSP 1248: 1925, 1927(M). WSP 1738: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 2,620 ft (799 m), from river-profile map. Prior to Feb. 17, 1912, nonrecording gage at several sites within a few hundred feet upstream at various datums.

REMARKS.--Records good. No regulation or diversion above station.

AVERAGE DISCHARGE.--60 years (water years 1909-11, 1924-80), 819 ft^3/s (23.19 m^3/s), 35.65 in/yr (906 mm/yr), 593,400 acre-ft/yr (732 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,400 ft^3/s (634 m^3/s) Dec. 22, 1964, gage height, 11.55 ft (3.520 m), from floodmark, from rating curve extended above 9,000 ft^3/s (255 m^3/s) on basis of slope-area measurement at 16,600 ft^3/s (470 m^3/s); minimum observed, 200 ft^3/s (5.66 m^3/s) Nov. 20, 1931.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,700 ft^3/s (76.5 m^3/s) and maximum discharge, 7,360 ft^3/s (208 m^3/s) Jan. 13, gage height, 6.57 ft (2.003 m); minimum not determined, occurred during period of no gage-height record Oct. 1-4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	301	685	636	882	768	1060	678	1080	643	486	375	351
2	312	576	1190	832	722	989	657	1060	650	480	375	346
3	323	551	2150	760	998	1010	643	1060	650	474	375	351
4	323	745	1540	752	971	1040	657	1080	629	469	370	346
5	323	952	1380	1080	865	1040	730	1110	636	469	370	346
6	323	745	1130	1230	952	1020	776	1060	623	469	370	342
7	323	636	998	989	874	961	722	980	636	458	370	342
8	323	576	926	882	824	899	768	935	609	452	365	342
9	323	533	874	816	791	857	998	989	603	447	365	337
10	319	503	943	776	760	824	1020	943	596	458	365	346
11	319	480	832	730	737	832	943	910	589	441	365	342
12	319	463	776	3410	715	784	952	880	609	436	360	337
13	319	452	722	6400	693	799	1070	880	609	431	360	351
14	356	441	685	5360	671	1120	1210	865	589	431	360	346
15	426	431	643	3510	657	971	1150	820	570	426	360	342
16	346	521	623	2740	664	874	1170	791	557	420	360	350
17	337	657	609	2360	693	857	1280	768	557	415	360	390
18	370	671	596	1890	980	832	1340	760	551	415	360	395
19	857	596	603	1580	1210	807	1350	776	545	410	360	390
20	643	551	596	1320	1180	848	1670	784	539	410	356	370
21	557	527	664	1220	1050	799	1610	791	533	405	356	370
22	480	570	609	1100	998	768	1360	784	527	400	351	356
23	557	623	596	1030	935	768	1320	760	576	395	351	351
24	557	1230	596	971	899	745	1300	737	539	395	351	346
25	1210	1250	564	917	908	737	1230	722	570	395	351	346
26	715	926	545	865	952	752	1220	715	551	390	351	342
27	583	776	527	824	1010	737	1260	685	527	390	351	342
28	527	707	521	685	1250	707	1340	664	509	385	351	342
29	486	664	521	707	1170	707	1280	650	503	385	351	342
30	491	636	545	707	---	707	1150	643	491	380	351	337
31	760	---	760	745	---	700	---	636	---	375	351	---
TOTAL	14408	19674	24900	48070	25897	26551	32854	26318	17316	13192	11167	10536
MEAN	465	656	803	1551	893	856	1095	849	577	426	360	351
MAX	1210	1250	2150	6400	1250	1120	1670	1110	650	486	375	395
MIN	301	431	521	685	657	700	643	636	491	375	351	337
CFSM	1.49	2.10	2.57	4.97	2.86	2.74	3.51	2.72	1.85	1.37	1.15	1.13
IN.	1.72	2.35	2.97	5.73	3.09	3.17	3.92	3.14	2.06	1.57	1.33	1.26
AC-FT	28580	39020	49390	95350	51370	52660	65170	52200	34350	26170	22150	20900

CAL YR 1979 TOTAL 261074 MEAN 715 MAX 4410 MIN 290 CFSM 2.29 IN 31.13 AC-FT 517800
WTR YR 1980 TOTAL 270883 MEAN 740 MAX 6400 MIN 301 CFSM 2.37 IN 32.30 AC-FT 537300

14330000 ROGUE RIVER BELOW PROSPECT, OR

LOCATION.--Lat 42°43'50", long 122°30'55", in SE¼NW¼ sec.6, T.33 S., R.3 E., Jackson County, Hydrologic Unit 17100307, on right bank 600 ft (183 m) downstream from Prospect No. 1 powerplant, 1.4 mi (2.3 km) downstream from Mill Creek, 2.0 mi (3.2 km) southwest of Prospect, 2.1 mi (3.4 km) upstream from South Fork Rogue River, and at mile 169.4 (272.6 km).

DRAINAGE AREA.--379 mi² (982 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1913 to September 1930, October 1968 to current year.

REVISED RECORDS.--WSP 1518: 1914-23, 1924(M), 1925, 1928.

GAGE.--Water-stage recorder. Altitude of gage is 1,970 ft (600 m), from topographic map. Prior to September 1927 nonrecording gage at site 1,000 ft (305 m) upstream, above powerplants, at different datum, also concurrent nonrecording gage on headrace to obtain equivalent combined flow.

REMARKS.--Water-discharge records good. Small fluctuations caused by powerplant 600 ft (183 m) above station. Small diversions for irrigation above station.

AVERAGE DISCHARGE.--29 years, 1,235 ft³/s (34.98 m³/s), 894,800 acre-ft/yr (1,103 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,900 ft³/s (309 m³/s) Jan. 18, 1971, gage height, 7.62 ft (2.323 m), from high-water mark; minimum, 205 ft³/s (5.81 m³/s) Sept. 17, 22, 24, 1980, caused by regulation of diversion gates upstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1890, 12.4 ft (3.78 m) Dec. 22, 1964, from floodmarks, discharge, 25,000 ft³/s (708 m³/s), from records for station above Prospect (see station 14328000) and for station below South Fork Rogue River near Prospect (see station 14335000) after adjusting for estimated intervening tributary inflow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,220 ft³/s (261 m³/s) Jan. 13, gage height, 6.93 ft (2.112 m); minimum, 205 ft³/s (5.81 m³/s) Sept. 17, 22, 24, caused by regulation of diversion gates upstream.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	724	1190	1190	1430	1380	1690	1330	1620	1330	1090	894	831
2	686	1060	1650	1390	1340	1640	1320	1690	1340	1080	887	825
3	653	1040	2650	1300	1600	1660	1300	1780	1330	1060	887	843
4	648	1240	2010	1300	1590	1710	1300	1800	1320	1060	868	887
5	669	1510	1900	1580	1500	1700	1390	1820	1330	1060	868	837
6	648	1250	1670	1760	1610	1690	1450	1780	1310	1060	887	825
7	653	1150	1580	1530	1520	1630	1380	1720	1330	1040	881	818
8	648	1050	1510	1420	1450	1570	1440	1660	1280	966	875	771
9	643	994	1460	1380	1410	1520	1650	1690	1280	1000	875	736
10	638	960	1520	1340	1380	1470	1680	1660	1280	1040	868	736
11	648	933	1400	1280	1360	1490	1610	1580	1250	1030	868	724
12	680	894	1390	4060	1330	1440	1610	1580	1260	1010	862	719
13	708	825	1330	7510	1310	1460	1720	1570	1250	1010	881	736
14	759	742	1260	6320	1310	1800	1840	1550	1230	1000	875	742
15	862	771	1190	4000	1310	1660	1810	1500	1210	980	875	742
16	747	1040	1160	3470	1300	1510	1820	1460	1190	994	862	747
17	724	1190	1170	2960	1310	1500	1890	1460	1190	987	856	691
18	788	1200	1160	2470	1550	1520	1920	1460	1190	973	894	788
19	1360	1140	1160	2110	1780	1490	1940	1470	1190	966	862	800
20	1120	1060	1170	1910	1770	1550	2190	1450	1170	960	856	759
21	1060	1030	1220	1800	1660	1490	2180	1490	1160	960	849	782
22	933	1080	1170	1720	1620	1440	1980	1510	1160	946	843	708
23	1020	1190	1160	1610	1570	1440	1940	1490	1230	933	843	753
24	1040	1700	1170	1570	1510	1410	1930	1450	1190	933	837	697
25	1610	1750	1120	1520	1520	1400	1880	1400	1220	926	843	730
26	1170	1440	1080	1460	1570	1420	1850	1390	1190	926	837	730
27	1060	1330	1060	1440	1620	1400	1900	1350	1150	913	831	724
28	1000	1280	1050	1330	1820	1370	1930	1350	1120	907	831	724
29	933	1210	1040	1190	1780	1380	1910	1330	1120	900	837	719
30	953	1190	1070	1270	---	1380	1750	1350	1110	900	843	713
31	1270	---	1280	1390	---	1360	---	1330	---	894	837	---
TOTAL	27055	34439	41950	66820	43780	47190	51840	47740	36910	30504	26712	22837
MEAN	873	1148	1353	2155	1510	1522	1728	1540	1230	984	862	761
MAX	1610	1750	2650	7510	1820	1800	2190	1820	1340	1090	894	887
MIN	638	742	1040	1190	1300	1360	1300	1330	1110	894	831	691
AC-FT	53660	68310	83210	132500	86840	93600	102800	94690	73210	60500	52980	45300

CAL YR 1979 TOTAL 469007 MEAN 1285 MAX 5050 MIN 638 AC-FT 930300
WTR YR 1980 TOTAL 477777 MEAN 1305 MAX 7510 MIN 638 AC-FT 947700

14330000 ROGUE RIVER BELOW PROSPECT, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1968 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1976 to current year.
pH: November 1976 to current year.
WATER TEMPERATURES: October 1968 to current year.
DISSOLVED OXYGEN: October 1979 to September 1980.
SUSPENDED SEDIMENT DISCHARGE: November 1976 to current year (October to April only, 1980 water year).

INSTRUMENTATION.--Water-quality monitor and automatic pumping sediment sampler since November 1976.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 73 micromhos Sept. 22, 1980; minimum recorded, 28 micromhos Jan. 13, 1980, may have been lower during period of missing record Jan. 14-17, 1980.
pH: Maximum, 8.0 units July 21, 22, July 24 to Aug. 6, 1978, many days June to October 1979, and several days in July, August 1980; minimum, 7.0 units Nov. 30, 1976.
WATER TEMPERATURES: Maximum, 20.5°C July 20, 1979 (result of regulation); minimum, 0.0°C Jan. 1, 2, 4, 5, 1970, Mar. 1, 1971, Jan. 26, 29-31, Feb. 2, 1979, and Jan. 29, 30, 1980.
DISSOLVED OXYGEN: Maximum, 13.4 mg/l Jan. 28, 30, 1980; minimum, 7.2 mg/l June 21, 1980, result of regulation.
SEDIMENT CONCENTRATIONS: Maximum daily mean (water years 1977-79), 1,270 mg/l (estimated) Jan. 11, 1979; minimum, 0 mg/l on many days each year. Maximum daily mean (period October 1979 to April 1980), 716 mg/l Oct. 25, 1979; minimum daily mean, 0 mg/l on several days in October and December 1979.
SEDIMENT DISCHARGE: Maximum daily (water years 1977-79), 17,790 tons (16,140 tonnes) Dec. 15, 1977; minimum daily, 0 tons (0 tonnes) on many days each year. Maximum daily (period October 1979 to April 1980), 5,570 tons (5,050 tonnes) Jan. 13, 1980; minimum daily, 0 tons (0 tonnes) on several days in October and December 1979.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 73 micromhos Sept. 22; minimum recorded, 28 micromhos Jan. 13, may have been lower during period of missing record Jan. 14-17.
pH: Maximum, 8.0 units several days in October, July and August; minimum, 7.5 units many days throughout year.
WATER TEMPERATURES: Maximum, 16.5°C July 21, 22, 27-29; minimum, 0.0°C Jan. 29, 30.
DISSOLVED OXYGEN: Maximum, 13.4 mg/l Jan. 28, 30; minimum, 7.2 mg/l June 21, result of regulation.
SEDIMENT CONCENTRATIONS: Maximum daily mean (October to April), 716 mg/l Oct. 25; minimum daily mean, 0 mg/l on several days in October and December.
SEDIMENT DISCHARGE: Maximum daily, 5,570 tons (5,050 tonnes) Jan. 13; minimum daily, 0 tons (0 tonnes) on several days in October and December.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
25...	1130	1160	40	125	47
25...	1530	1990	1107	5950	45
25...	2130	1490	1290	5190	46
26...	0330	1280	1001	3460	45
26...	0930	1120	195	590	42
26...	1530	1160	54	169	70
DEC					
02...	2330	1800	93	452	72
03...	0030	1780	119	572	69
03...	0130	1860	145	728	66
03...	0230	1840	105	522	60
03...	0330	1800	122	593	68
03...	0430	1840	102	507	82
03...	0530	1820	98	482	74
03...	0630	1800	94	457	78
03...	1050	2730	110	811	54
JAN					
12...	0815	3330	90	809	69
12...	0830	3470	68	637	69
12...	1000	4210	147	1670	50
12...	1130	4800	176	2280	59
JAN					
12...	1300	5040	199	2710	59
12...	1430	5270	229	3260	51
12...	1600	5500	211	3130	60
12...	1730	5560	275	4130	39
12...	1900	5350	220	3180	46
12...	2030	5420	335	4900	26
12...	2200	5270	137	1950	55
12...	2330	5260	120	1700	63
13...	0100	5630	121	1840	67
13...	0230	5790	168	2630	41
13...	0400	6210	110	1840	39
13...	0530	6700	144	2610	49
13...	0700	7220	166	3240	44
13...	0830	7720	236	4920	50
13...	1130	8150	307	6760	38
13...	1300	8360	413	9320	42
13...	1430	8390	405	9170	31
13...	1600	8840	151	3600	49
13...	1730	8150	814	17900	22
13...	1900	8050	221	4800	53
JAN					
13...	2030	8050	294	6390	48
13...	2200	7840	227	4810	51
13...	2330	7610	166	3410	52
14...	0100	7750	443	9270	19
14...	0230	7270	173	3400	46
14...	0400	7070	206	3930	35
14...	0530	6760	268	4890	24
14...	0700	6610	133	2370	53
14...	0830	6480	136	2380	42
JAN					
14...	1000	6170	183	3050	36
14...	1130	5990	129	2090	52
14...	1300	5850	179	2830	28
14...	1400	5750	200	3110	24
15...	1210	2190	546	3230	30
17...	1405	2880	66	513	45
17...	1420	2870	23	178	75

14330000 ROGUE RIVER BELOW PROSPECT, OR--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	56	54	52	50	50	52	46	51	57	62	60
2	65	57	52	52	51	51	53	46	51	58	62	60
3	65	58	---	54	48	51	53	46	51	58	62	62
4	66	56	45	54	47	50	53	46	51	58	62	62
5	65	53	46	52	49	51	52	45	51	59	62	60
6	65	55	48	48	48	50	51	45	51	58	62	59
7	65	56	48	50	47	51	51	46	51	59	62	59
8	65	57	49	51	48	51	51	45	51	60	61	61
9	65	56	49	52	49	52	51	46	52	59	61	62
10	65	57	49	52	49	52	50	46	52	59	61	61
11	65	57	48	52	50	51	51	47	52	60	61	61
12	65	58	50	40	50	51	52	47	52	60	61	62
13	64	58	51	31	50	52	51	48	52	61	60	62
14	64	58	52	---	53	49	50	48	52	61	60	62
15	62	58	52	---	53	49	49	48	54	61	60	62
16	64	57	52	---	53	51	49	49	54	62	60	63
17	65	53	53	---	53	51	48	49	55	62	59	63
18	66	52	53	41	50	51	46	49	55	62	59	62
19	60	53	53	43	47	52	46	49	55	62	59	61
20	60	55	52	44	47	52	44	49	55	62	58	62
21	60	56	52	45	49	52	42	48	55	63	59	62
22	62	55	52	46	50	52	45	47	55	63	59	63
23	62	53	53	47	50	53	45	48	55	62	59	62
24	62	50	52	48	51	53	46	49	55	62	59	63
25	---	45	53	49	51	53	46	49	55	62	59	63
26	---	48	54	49	51	53	46	50	55	62	59	63
27	60	51	55	50	50	52	46	50	56	62	59	63
28	59	52	55	49	49	52	45	51	57	63	60	63
29	60	53	55	50	49	52	44	51	57	63	60	63
30	60	54	55	50	---	52	45	51	57	62	59	63
31	57	---	53	50	---	52	---	51	---	62	59	---
MEAN	63	55	52	48	50	51	48	48	54	61	60	62

14330000 ROGUE RIVER BELOW PROSPECT, OR--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.9	7.7	7.8	7.7	7.8	7.7	7.7	7.6	7.7	7.6	7.7	7.6
2	7.9	7.7	7.8	7.7	7.7	7.6	7.7	7.6	7.7	7.6	7.7	7.6
3	8.0	7.7	7.8	7.7	7.7	7.5	7.7	7.6	7.6	7.6	7.7	7.6
4	7.9	7.7	7.8	7.7	7.6	7.5	7.7	7.6	7.6	7.6	7.7	7.6
5	7.9	7.7	7.7	7.7	7.6	7.6	7.6	7.6	7.7	7.6	7.7	7.7
6	7.9	7.7	7.8	7.7	7.7	7.6	7.6	7.5	7.7	7.6	7.7	7.6
7	8.0	7.7	7.8	7.7	7.7	7.6	7.6	7.6	7.8	7.7	7.7	7.6
8	7.9	7.7	7.8	7.7	7.7	7.6	7.6	7.6	7.7	7.6	7.7	7.6
9	7.9	7.7	7.8	7.7	7.7	7.6	7.7	7.6	7.7	7.7	7.7	7.6
10	7.9	7.7	7.8	7.7	7.7	7.6	7.7	7.6	7.7	7.6	7.7	7.7
11	7.9	7.7	7.8	7.7	7.7	7.6	7.7	7.6	7.7	7.7	7.8	7.7
12	7.9	7.7	7.8	7.7	7.7	7.6	---	---	7.8	7.7	7.8	7.7
13	8.0	7.7	7.8	7.7	7.7	7.6	---	---	7.8	7.7	7.8	7.6
14	7.8	7.7	7.8	7.7	7.7	7.6	---	---	7.7	7.7	7.7	7.6
15	7.9	7.7	7.8	7.7	7.7	7.6	---	---	7.8	7.6	7.7	7.6
16	7.9	7.7	7.7	7.6	7.7	7.6	---	---	7.8	7.7	7.7	7.7
17	7.9	7.7	7.8	7.7	7.7	7.6	---	---	7.8	7.7	7.7	7.7
18	7.8	7.7	7.8	7.7	7.7	7.6	7.5	7.5	7.7	7.6	7.8	7.7
19	7.7	7.7	7.8	7.7	7.8	7.6	7.5	7.5	7.6	7.6	7.8	7.7
20	7.8	7.7	7.9	7.8	7.8	7.7	7.5	7.5	7.7	7.6	7.8	7.7
21	7.8	7.7	7.8	7.7	7.8	7.7	7.5	7.5	7.7	7.6	7.8	7.7
22	7.8	7.7	7.8	7.7	7.8	7.6	7.6	7.5	7.7	7.6	7.8	7.7
23	7.9	7.7	7.8	7.7	7.7	7.7	7.6	7.5	7.7	7.6	7.8	7.7
24	7.8	7.7	7.7	7.6	7.7	7.6	7.6	7.5	7.7	7.6	7.8	7.7
25	---	---	7.7	7.6	7.8	7.6	7.6	7.6	7.7	7.6	7.8	7.7
26	---	---	7.8	7.7	7.8	7.6	7.6	7.6	7.7	7.6	7.8	7.7
27	7.8	7.7	7.8	7.7	7.7	7.7	7.6	7.6	7.7	7.6	7.8	7.7
28	7.8	7.7	7.8	7.7	7.8	7.7	7.7	7.6	7.7	7.6	7.8	7.7
29	7.9	7.7	7.8	7.7	7.8	7.6	7.7	7.6	7.7	7.6	7.8	7.7
30	7.8	7.7	7.7	7.6	7.8	7.7	7.7	7.6	---	---	7.8	7.7
31	7.7	7.6	---	---	7.7	7.6	7.6	7.6	---	---	7.8	7.7
MONTH	8.0	7.6	7.9	7.6	7.8	7.5	7.7	7.5	7.8	7.6	7.8	7.6

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.8	7.7	7.6	7.6	7.8	7.6	7.9	7.6	7.9	7.6	7.9	7.6
2	7.8	7.7	7.6	7.5	7.8	7.6	7.9	7.6	7.9	7.6	7.9	7.6
3	7.8	7.6	7.6	7.5	7.8	7.6	7.9	7.6	7.9	7.6	7.8	7.6
4	7.7	7.6	7.6	7.5	7.7	7.6	7.9	7.6	7.9	7.6	---	---
5	7.7	7.6	7.6	7.5	7.8	7.6	7.9	7.6	7.9	7.6	7.9	7.6
6	7.7	7.6	7.6	7.5	7.7	7.6	7.9	7.6	7.9	7.6	7.9	7.6
7	7.7	7.6	7.6	7.5	7.8	7.6	7.9	7.6	7.9	7.6	7.9	7.6
8	7.7	7.6	7.6	7.5	7.8	7.5	7.9	7.6	7.9	7.6	7.9	7.7
9	7.7	7.6	7.6	7.6	7.8	7.6	7.9	7.6	7.9	7.6	7.9	7.6
10	7.7	7.6	7.6	7.5	7.8	7.6	7.9	7.7	7.9	7.6	7.9	7.6
11	7.7	7.6	7.6	7.5	7.8	7.6	7.9	7.6	7.9	7.6	7.9	7.6
12	7.7	7.6	7.7	7.5	7.8	7.6	7.9	7.6	7.9	7.6	7.9	7.6
13	7.7	7.6	7.7	7.5	7.8	7.6	7.9	7.6	7.9	7.6	7.9	7.7
14	7.7	7.6	7.7	7.6	7.8	7.6	8.0	7.6	7.9	7.6	7.9	7.6
15	7.7	7.6	7.7	7.5	7.8	7.6	7.9	7.6	7.9	7.6	7.9	7.6
16	7.7	7.6	7.7	7.5	7.8	7.6	7.9	7.6	7.9	7.6	7.9	7.6
17	7.7	7.6	7.7	7.5	7.8	7.6	8.0	7.6	7.9	7.6	7.8	7.6
18	7.6	7.6	7.7	7.5	7.8	7.6	8.0	7.6	8.0	7.7	7.9	7.6
19	7.6	7.6	7.7	7.5	7.9	7.6	7.9	7.6	7.9	7.7	7.9	7.6
20	7.6	7.5	7.7	7.5	7.9	7.6	7.9	7.6	7.9	7.6	7.9	7.6
21	7.6	7.5	7.7	7.5	7.9	7.6	8.0	7.6	8.0	7.6	7.9	7.6
22	7.6	7.5	7.7	7.6	7.9	7.7	8.0	7.6	8.0	7.7	7.8	7.6
23	7.6	7.5	7.7	7.6	7.8	7.6	7.9	7.6	8.0	7.6	7.8	7.6
24	7.6	7.6	7.7	7.6	7.8	7.6	7.9	7.6	7.9	7.6	7.8	7.6
25	7.6	7.6	7.7	7.6	7.9	7.7	7.9	7.6	7.9	7.6	7.9	7.6
26	7.6	7.5	7.7	7.6	7.8	7.6	7.9	7.6	8.0	7.6	7.9	7.6
27	7.6	7.5	7.7	7.6	7.9	7.6	7.9	7.5	8.0	7.6	7.9	7.6
28	7.6	7.5	7.7	7.6	7.9	7.6	7.9	7.5	7.9	7.6	7.9	7.6
29	7.6	7.6	7.8	7.6	7.9	7.6	7.9	7.6	7.9	7.6	7.9	7.6
30	7.6	7.5	7.8	7.6	7.9	7.6	7.9	7.6	7.9	7.6	7.8	7.6
31	---	---	7.8	7.6	---	---	7.9	7.6	7.9	7.6	---	---
MONTH	7.8	7.5	7.8	7.5	7.9	7.5	8.0	7.5	8.0	7.6	7.9	7.6

14330000 ROGUE RIVER BELOW PROSPECT, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	10.0	7.5	6.5	5.5	4.0	3.0	4.0	3.5	2.5	1.5	5.0	4.5
2	10.0	8.0	6.0	5.5	---	---	3.5	3.0	3.5	2.5	6.0	5.0
3	10.5	8.5	6.0	5.5	---	---	4.5	3.5	4.0	3.5	5.5	5.0
4	10.5	8.5	6.0	6.0	4.5	4.0	4.5	4.0	3.5	3.0	6.0	5.0
5	10.5	8.5	6.5	5.5	4.0	3.5	4.5	4.0	3.5	3.0	5.5	5.0
6	10.0	9.0	6.0	5.5	4.0	3.5	4.0	3.5	4.0	3.5	5.5	4.5
7	10.5	8.5	6.0	5.5	4.0	3.5	3.5	3.0	3.5	2.5	6.0	4.5
8	10.0	8.5	6.5	4.5	4.5	3.5	3.5	3.0	3.0	2.0	5.5	4.5
9	9.5	8.0	4.5	4.0	4.5	4.0	3.5	3.0	3.5	2.0	5.5	4.0
10	9.5	8.0	4.0	3.0	4.5	3.5	3.0	1.5	4.0	3.0	6.0	4.0
11	9.5	7.5	4.0	3.0	3.5	1.5	2.0	1.0	4.0	2.5	5.5	4.0
12	9.0	7.5	4.0	3.0	2.5	1.5	---	2.0	3.5	2.5	4.0	3.5
13	9.0	8.0	4.0	3.0	2.5	2.0	---	---	3.5	2.5	3.5	3.0
14	8.5	8.0	4.0	3.0	2.5	1.5	---	---	3.5	2.5	3.5	2.5
15	9.5	8.0	4.5	3.0	2.0	1.5	---	---	4.5	3.5	3.0	2.0
16	8.5	7.5	5.5	4.5	2.5	1.5	---	---	4.5	4.0	4.0	2.0
17	8.5	7.5	6.0	5.5	4.0	2.5	---	---	5.0	4.5	4.0	3.0
18	8.0	7.0	5.5	3.5	4.5	3.5	3.5	2.0	4.5	4.5	4.5	3.0
19	7.0	6.5	4.0	3.0	4.5	4.0	2.0	1.5	4.5	4.0	6.0	3.5
20	6.5	5.5	3.5	2.5	4.5	4.0	2.5	2.0	4.5	4.0	5.0	4.0
21	6.0	5.0	3.0	2.0	4.0	3.0	3.0	2.5	4.0	3.5	4.0	3.0
22	6.0	6.0	3.5	3.0	2.5	2.0	3.5	3.0	4.0	3.0	5.5	3.0
23	7.0	6.0	3.0	2.5	2.0	1.5	3.5	3.0	4.0	2.5	5.5	4.0
24	7.0	6.5	---	2.5	2.0	1.5	3.5	3.0	5.0	4.0	5.5	3.5
25	---	---	---	3.0	2.5	1.5	3.0	2.5	5.0	4.5	5.5	4.0
26	---	---	3.5	2.5	2.5	2.0	2.5	1.5	5.5	4.5	5.0	4.5
27	7.0	6.5	2.5	2.0	2.0	1.5	2.0	1.0	5.5	5.5	5.5	4.0
28	6.5	6.0	3.0	2.0	2.0	1.0	1.0	.5	5.5	5.0	6.0	3.5
29	6.0	5.5	3.5	2.5	3.0	2.0	3.0	.0	5.0	4.5	6.0	4.0
30	5.5	5.0	4.0	3.0	3.5	3.0	1.5	.0	---	---	6.0	4.0
31	6.5	5.5	---	---	4.0	3.5	2.5	.5	---	---	4.5	3.5
MONTH	10.5	5.0	6.5	2.0	4.5	1.0	4.5	.0	5.5	1.5	6.0	2.0

OAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	4.5	3.5	9.0	7.0	11.0	9.5	15.0	11.0	15.5	12.0	11.5	8.5
2	5.0	3.0	10.5	8.0	9.5	7.5	15.5	12.0	15.0	11.5	11.0	9.0
3	6.0	3.5	10.5	8.5	10.5	6.5	13.5	11.5	14.5	11.0	10.5	8.0
4	5.5	4.5	11.0	9.0	8.5	6.5	12.0	10.5	14.5	11.0	12.0	8.0
5	6.0	5.0	10.5	9.5	9.5	7.0	13.0	10.0	14.0	10.5	12.5	9.5
6	5.0	3.5	9.5	8.0	9.0	7.5	14.0	10.0	13.5	10.0	12.5	10.0
7	4.5	3.0	9.0	7.0	10.5	8.0	14.5	10.5	13.5	10.0	12.0	10.0
8	5.0	4.0	8.5	7.5	12.0	8.5	14.5	11.0	14.0	10.5	11.5	9.0
9	6.0	4.5	7.5	5.5	13.0	10.0	13.5	11.0	14.0	10.5	12.0	9.0
10	6.0	4.5	5.5	5.0	13.0	9.5	13.5	10.5	14.5	11.0	12.5	10.0
11	7.0	4.5	7.0	5.0	11.0	10.0	14.0	10.0	14.5	11.5	12.0	9.5
12	8.0	5.5	9.0	7.0	10.5	9.0	14.5	10.5	14.0	10.5	11.5	9.5
13	7.5	6.0	9.0	8.0	9.5	8.5	14.0	10.5	14.0	10.5	10.5	9.0
14	7.0	6.0	9.0	7.5	9.0	7.5	14.0	11.0	14.0	11.0	9.0	8.5
15	7.5	5.0	9.0	7.0	11.5	7.0	14.5	10.5	13.5	10.5	9.5	7.0
16	8.0	6.0	9.5	6.5	11.5	9.5	15.0	11.5	13.5	10.0	10.5	7.5
17	8.0	6.5	10.5	7.5	13.0	9.0	15.0	11.0	13.0	10.0	10.5	8.5
18	8.0	6.0	11.0	8.5	13.5	9.5	15.0	11.5	12.5	10.5	10.5	9.5
19	8.5	7.0	12.0	9.0	13.5	10.0	15.0	11.0	12.5	9.5	10.5	9.0
20	8.0	5.5	12.5	9.5	14.5	10.0	15.5	11.5	13.0	9.5	9.5	9.0
21	5.5	4.5	12.0	10.5	14.5	11.0	16.5	12.5	13.0	9.5	9.5	7.5
22	6.5	5.5	10.5	7.5	12.5	11.0	16.5	13.0	13.0	9.5	9.5	6.5
23	8.0	6.5	7.5	6.5	11.0	9.5	16.0	12.5	13.0	9.5	10.0	7.5
24	8.5	7.5	7.0	6.0	10.0	9.0	15.5	12.0	13.5	10.0	10.0	8.0
25	8.0	6.5	7.5	6.0	11.0	8.5	15.5	12.0	13.5	10.0	10.5	8.5
26	9.5	7.5	7.5	6.5	10.5	8.5	16.0	12.0	13.0	10.0	10.5	9.0
27	10.0	8.0	9.0	6.5	12.5	8.0	16.5	12.5	12.5	10.0	10.5	8.5
28	9.0	8.0	10.0	7.5	14.0	9.5	16.5	13.0	11.5	9.0	10.5	8.5
29	9.0	7.5	11.0	7.5	14.5	11.0	16.5	13.0	10.0	8.5	10.0	8.0
30	8.0	6.5	11.5	8.5	14.5	11.0	16.0	12.5	10.0	7.0	10.0	8.0
31	---	---	12.0	8.5	---	---	16.0	12.5	11.0	8.0	---	---
MONTH	10.0	3.0	12.5	5.0	14.5	6.5	16.5	10.0	15.5	7.0	12.5	6.5

14330000 ROGUE RIVER BELOW PROSPECT, OR--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	11.1	10.4	10.8	10.8	10.2	10.5	13.1	12.5	12.9	11.7	11.2	11.5
2	10.9	10.3	10.6	11.3	10.8	11.1	---	---	---	11.9	11.5	11.7
3	11.0	10.2	10.6	12.2	11.2	11.5	---	---	---	11.8	11.3	11.5
4	10.8	10.2	10.5	11.4	11.2	11.3	12.4	11.9	12.0	12.3	11.4	11.6
5	11.0	10.0	10.5	11.3	11.0	11.2	12.5	11.8	12.2	11.9	11.5	11.6
6	10.7	10.3	10.5	11.2	11.0	11.1	12.3	11.2	11.8	12.0	11.7	11.8
7	10.7	10.1	10.4	11.5	11.1	11.3	11.9	11.2	11.6	12.0	11.7	11.9
8	10.7	10.1	10.4	12.7	11.3	11.6	11.8	11.3	11.6	11.9	11.6	11.8
9	10.6	10.1	10.4	12.4	11.5	12.0	12.8	11.2	11.9	11.8	11.5	11.6
10	10.8	10.2	10.5	12.5	12.0	12.2	12.6	12.4	12.5	12.4	11.6	12.2
11	10.7	10.0	10.4	12.6	12.1	12.3	13.2	12.6	13.0	12.4	11.9	12.2
12	10.7	10.1	10.4	12.6	12.2	12.4	13.3	11.0	12.6	---	---	---
13	10.6	10.0	10.3	12.6	12.0	12.3	11.3	11.0	11.2	---	---	---
14	10.4	9.9	10.2	12.5	12.0	12.3	11.2	10.9	11.1	---	---	---
15	10.6	10.2	10.4	12.6	11.9	12.3	11.3	11.1	11.2	---	---	---
16	10.7	10.1	10.4	12.0	11.4	11.8	11.5	11.1	11.3	---	---	---
17	10.8	10.2	10.4	11.5	10.8	11.2	11.2	10.7	11.0	---	---	---
18	10.9	10.3	10.6	---	---	---	10.9	10.6	10.8	12.3	11.9	12.2
19	---	---	---	---	---	---	11.4	10.7	11.0	12.5	12.2	12.4
20	---	---	---	---	---	---	11.3	10.9	11.1	12.4	12.1	12.3
21	---	---	---	13.1	12.9	13.0	11.5	10.9	11.2	12.3	11.8	12.1
22	---	---	---	12.9	12.7	12.8	11.8	11.5	11.7	12.1	11.8	12.0
23	---	---	10.6	13.1	12.9	13.0	11.8	11.6	11.7	12.1	11.8	12.0
24	---	---	---	---	---	---	11.9	11.6	11.8	12.1	11.7	11.9
25	---	---	---	---	---	---	12.1	11.8	12.0	12.2	11.7	12.0
26	---	---	---	---	---	---	12.2	11.9	12.0	12.4	12.0	12.2
27	11.0	10.7	10.9	---	---	---	12.2	12.0	12.1	12.4	12.2	12.3
28	11.1	10.8	10.9	---	---	---	12.3	11.9	12.2	13.4	12.4	12.8
29	11.3	10.9	11.1	---	---	---	12.1	11.5	11.8	13.3	---	---
30	11.1	10.7	10.9	---	---	---	11.7	11.4	11.6	13.4	---	---
31	10.8	10.0	10.6	---	---	---	11.7	11.3	11.5	13.1	---	---
MONTH	11.3	9.9	10.6	13.1	10.2	11.9	13.3	10.6	11.7	13.4	11.2	12.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	12.9	12.5	12.7	10.6	10.2	10.4	12.3	11.9	12.1	11.1	10.2	10.7
2	12.6	12.1	12.3	10.3	9.8	10.1	12.5	11.4	12.1	10.9	10.4	10.5
3	12.3	12.0	12.2	10.3	10.0	10.1	11.8	9.7	11.5	10.9	10.1	10.6
4	12.4	12.0	12.2	10.5	10.0	10.2	11.6	11.2	11.4	10.7	10.0	10.4
5	12.3	12.0	12.2	10.2	10.0	10.1	11.5	11.2	11.3	10.5	10.2	10.4
6	12.3	11.3	12.0	11.4	10.2	10.4	12.1	11.5	11.9	10.9	10.5	10.7
7	11.7	11.3	11.5	11.3	10.7	11.0	12.3	11.8	12.1	11.2	10.4	10.8
8	11.8	11.4	11.6	11.2	10.8	11.0	12.1	11.6	11.9	10.8	10.4	10.6
9	11.8	11.5	11.7	11.5	10.8	11.2	11.9	11.5	11.7	11.1	10.7	10.9
10	11.8	11.2	11.5	11.4	10.8	11.1	11.9	11.1	11.7	11.4	11.1	11.3
11	11.7	11.3	11.6	11.5	10.9	11.1	11.9	11.2	11.6	11.3	10.7	11.0
12	12.0	11.6	11.8	11.8	11.5	11.6	11.7	10.9	11.3	10.9	10.3	10.6
13	12.1	11.7	11.9	11.8	11.6	11.7	11.5	11.0	10.8	11.5	10.5	10.8
14	12.0	11.7	11.8	11.9	11.6	11.8	11.5	11.1	11.3	11.3	10.7	11.1
15	11.9	11.5	11.7	12.3	12.0	12.1	11.8	11.0	11.4	11.3	10.8	11.1
16	11.9	11.4	11.6	12.4	11.9	12.1	11.6	10.4	11.0	11.5	10.6	11.1
17	11.7	11.3	11.5	12.2	11.8	12.0	11.1	10.6	10.8	11.2	10.3	10.8
18	11.7	11.4	11.5	12.2	11.7	12.0	11.2	10.7	10.9	11.0	10.2	10.7
19	11.8	11.5	11.7	12.1	10.8	11.6	11.0	10.5	10.8	11.0	10.1	10.5
20	12.0	11.7	11.8	11.5	10.9	11.2	11.2	10.6	10.9	10.9	10.0	10.5
21	12.2	11.0	11.8	12.0	11.5	11.7	11.5	11.0	11.2	10.6	10.0	10.4
22	11.3	10.9	11.1	12.0	11.3	11.7	11.3	10.6	11.1	11.5	10.6	11.2
23	11.4	10.8	11.1	11.9	11.4	11.6	11.0	10.5	10.8	11.9	11.5	11.7
24	11.0	10.4	10.7	12.0	11.4	11.7	10.9	10.5	10.7	12.0	11.6	11.8
25	10.7	10.4	10.6	11.7	11.3	11.6	11.3	10.6	10.9	11.9	11.3	11.6
26	10.6	10.2	10.4	11.9	11.5	11.7	10.9	10.4	10.6	11.7	11.3	11.5
27	10.4	10.1	10.3	12.1	11.6	11.8	10.9	10.3	10.6	11.6	10.7	11.2
28	10.5	10.2	10.3	12.2	11.6	11.9	11.0	10.5	10.7	12.2	10.7	11.2
29	10.8	10.3	10.5	12.2	11.6	11.9	11.1	10.5	10.8	11.6	10.7	11.2
30	---	---	---	12.1	11.6	11.9	11.4	10.7	11.0	11.2	10.5	10.9
31	---	---	---	12.2	11.9	12.1	---	---	---	11.2	10.3	10.8
MONTH	12.9	10.1	11.5	12.4	9.8	11.4	12.5	9.7	11.2	12.2	10.0	10.9

14330000 ROGUE RIVER BELOW PROSPECT, OR--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	10.9	10.5	10.7	10.8	9.9	10.4	9.8	8.9	9.3	10.8	9.8	10.4
2	11.8	11.3	11.5	10.9	9.8	10.4	9.9	9.0	9.5	10.8	10.1	10.5
3	11.8	8.8	11.3	10.6	9.9	10.3	10.0	9.0	9.5	10.9	---	---
4	11.7	11.1	11.4	10.7	10.2	10.4	10.0	9.0	9.5	11.5	---	---
5	11.5	8.8	11.0	10.8	10.0	10.4	10.2	8.9	9.6	10.9	10.1	10.4
6	11.7	10.9	11.2	10.8	9.7	10.2	9.9	9.0	9.5	10.6	8.2	10.3
7	11.3	10.5	11.0	10.7	9.5	10.0	10.3	9.0	9.6	10.7	8.3	10.3
8	11.3	10.3	10.8	10.4	9.2	9.8	10.1	9.1	9.6	10.9	10.3	10.6
9	11.0	10.0	10.6	10.0	8.7	9.5	10.3	9.2	9.7	10.9	10.0	10.5
10	11.2	10.2	10.7	9.6	8.3	9.0	10.3	9.2	9.8	10.7	10.0	10.4
11	11.1	10.7	10.9	9.3	8.1	8.7	10.2	9.4	9.8	10.7	10.0	10.3
12	11.4	10.9	11.1	9.3	8.3	8.8	10.5	9.5	10.0	10.6	10.1	10.3
13	11.6	11.2	11.4	9.2	8.2	8.7	10.5	9.3	9.9	10.9	10.4	10.7
14	11.8	11.4	11.5	8.9	8.0	8.5	10.2	9.4	9.9	11.4	10.4	11.1
15	12.1	10.5	11.4	9.0	7.5	8.2	10.5	9.6	10.0	11.3	10.5	10.9
16	11.1	10.5	10.7	8.7	8.0	8.3	10.6	9.6	10.2	11.3	9.8	10.8
17	11.2	10.1	10.8	9.2	7.9	8.6	10.6	9.6	10.1	10.9	---	---
18	10.9	9.7	10.4	9.4	8.3	8.8	10.3	9.4	9.9	11.9	10.8	11.1
19	10.8	9.7	10.3	10.1	8.9	9.4	10.8	9.8	10.4	11.7	10.9	11.3
20	10.8	9.7	10.1	9.9	8.9	9.4	11.3	10.3	10.9	11.3	11.1	11.2
21	10.7	7.2	10.1	9.9	9.0	9.4	11.1	10.2	10.7	11.7	11.1	11.4
22	10.7	10.2	10.4	9.8	8.9	9.4	11.2	10.2	10.7	11.9	10.8	11.3
23	10.9	10.3	10.6	10.1	9.2	9.6	11.1	10.1	10.6	11.6	10.9	11.3
24	10.9	10.5	10.7	9.6	8.8	9.2	11.0	10.0	10.5	11.6	10.9	11.2
25	11.1	10.5	10.8	9.9	8.9	9.4	10.7	9.9	10.3	11.4	10.6	11.1
26	11.3	10.7	11.0	9.8	8.8	9.3	10.8	9.7	10.3	11.2	10.6	10.9
27	11.8	10.4	11.1	9.7	8.7	9.2	10.7	9.8	10.3	11.2	10.6	10.9
28	11.1	9.9	10.5	9.4	8.5	9.0	10.8	10.0	10.4	11.2	10.6	10.9
29	10.8	9.8	10.3	9.5	8.6	9.0	11.0	10.3	10.6	11.3	10.4	10.9
30	10.9	9.8	10.4	9.5	8.7	9.1	11.3	10.3	10.7	11.2	10.5	10.9
31	---	---	---	9.7	8.8	9.2	11.1	10.0	10.5	---	---	---
MONTH	12.1	7.2	10.8	10.9	7.5	9.3	11.3	8.9	10.1	11.9	8.2	10.8

14330000 ROGUE RIVER BELOW PROSPECT, OR--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

OAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7	14	7	22	4	13	2	7.7	8	30	5	23
2	3	5.6	13	37	24	156	2	7.5	11	40	7	31
3	19	33	8	22	118	900	1	3.5	12	52	5	22
4	0	.00	4	13	10	54	2	7.0	15	64	4	18
5	0	.00	9	37	3	15	8	34	10	40	3	14
6	0	.00	3	10	2	9.0	9	43	13	57	7	32
7	0	.00	4	12	4	17	4	17	8	33	11	48
8	1	1.7	4	11	3	12	4	15	7	27	10	42
9	0	.00	---	11	2	7.9	3	11	5	19	9	37
10	0	.00	---	10	1	4.1	2	7.2	5	19	9	36
11	0	.00	---	7.5	1	3.8	3	10	5	18	10	40
12	0	.00	---	7.2	3	11	143	1930	4	14	5	19
13	0	.00	---	6.7	2	7.2	266	5570	5	18	5	20
14	1	2.0	---	6.0	2	6.8	186	3160	5	18	9	44
15	4	9.3	---	6.2	---	6.4	54	857	5	18	6	27
16	1	2.0	3	8.4	---	6.3	---	796	8	28	3	12
17	1	2.0	4	13	---	6.3	48	384	6	21	2	8.1
18	1	2.1	---	13	---	6.3	14	93	26	128	2	8.2
19	42	161	---	12	2	6.3	11	63	18	87	6	24
20	12	36	4	11	0	.00	10	52	8	38	6	25
21	5	14	2	5.6	3	9.9	8	37	12	54	4	16
22	7	18	1	2.9	2	6.3	7	33	14	61	8	31
23	5	14	2	6.4	1	3.1	9	39	12	51	5	19
24	3	8.4	24	132	3	9.5	8	34	10	41	3	11
25	716	3350	15	72	3	9.1	9	37	9	37	1	3.8
26	343	1150	7	27	1	2.9	7	28	7	30	2	7.7
27	10	29	3	11	0	.00	7	27	7	31	1	3.8
28	4	11	4	14	0	.00	6	22	12	59	2	7.4
29	2	5.0	5	16	1	2.8	11	42	11	53	2	7.5
30	---	5.2	4	13	1	2.9	9	31	---	---	1	3.7
31	9	31	---	---	2	6.9	11	41	---	---	1	3.7
TOTAL	---	4904.30	---	575.9	---	1301.80	---	13438.9	---	1186	---	644.9

OAY	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN-TRATION (MG/L)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	4	14										
2	7	25										
3	10	35										
4	10	35										
5	10	38										
6	5	20										
7	4	15										
8	2	7.8										
9	3	13										
10	8	36										
11	9	39										
12	5	22										
13	6	28										
14	7	35										
15	6	29										
16	11	54										
17	17	87										
18	17	88										
19	19	100										
20	26	155										
21	16	94										
22	24	127										
23	13	66										
24	12	60										
25	5	25										
26	4	20										
27	4	21										
28	5	26										
29	4	21										
30	2	9.5										
31	---	---										
TOTAL	---	1345.3										

14332001 SOUTH FORK ROGUE RIVER NEAR PROSPECT, OR

LOCATION.--Lat 42°42'30", long 122°23'30", in SE¼SW¼ sec.7, T.33 S., R.4 E., Jackson County, Hydrologic Unit 17100307, in Rogue River National Forest on left bank 0.3 mi (0.5 km) downstream from South Fork dam and intake of South Fork power canal, 0.31 mi (0.50 km) downstream from Imnaha Creek, 5.6 mi (9.0 km) southeast of Prospect, and at mile 10.2 (16.4 km).

DRAINAGE AREA.--83.8 mi^2 (217 km^2). Area at site above Imnaha Creek used October 1931 to September 1949, 61.3 mi^2 (158.8 km^2), and Imnaha Creek near Prospect, 22.2 mi^2 (57.5 km^2).

PERIOD OF RECORD.--April 1924 to September 1931, October 1949 to current year. Equivalent records for period October 1931 to September 1949 may be obtained from combined flow of South Fork Rogue River above Imnaha Creek, near Prospect and Imnaha Creek near Prospect.

REVISED RECORDS.--WSP 1318: 1925(M), 1927(M), 1930(M). WSP 1738: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 3,300 ft (1,006 m), from topographic map. Prior to Sept. 10, 1965, at site 1,000 ft (305 m) upstream at different datum.

REMARKS.--Records good. All records given herein include flow in South Fork power canal (completed in March 1932) which diverts 1,500 ft (457 m) above station and returns water to Rogue River above South Fork Rogue River; practically no storage above diversion dam.

AVERAGE DISCHARGE.--56 years (water years 1925-80), 177 ft^3/s (5.013 m^3/s), 128,200 acre-ft/yr (158 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--River only, maximum discharge, 7,010 ft^3/s (199 m^3/s) Dec. 22, 1964, gage height, 11.1 ft (3.38 m), from floodmark, from rating curve extended above 410 ft^3/s (11.6 m^3/s) on basis of measurement of flow over dam of 3,180 ft^3/s (90.1 m^3/s); no flow Jan. 31, 1950, Sept. 29, 30, 1967 (entire flow diverted to canal).

Combined flow, maximum discharge, 7,010 ft^3/s (199 m^3/s) Dec. 22, 1964 (no flow in canal); minimum daily, about 38 ft^3/s (1.08 m^3/s) Aug. 1-31, 1931.

EXTREMES FOR CURRENT YEAR.--River only, maximum discharge, 935 ft^3/s (26.5 m^3/s) Jan. 13, gage height, 4.36 ft (1.329 m); minimum, 0.35 ft^3/s (0.010 m^3/s) Aug. 29-31.

Combined flow, maximum discharge, 1,080 ft^3/s (30.6 m^3/s) Jan. 13; minimum daily, 54 ft^3/s (1.53 m^3/s) Oct. 12, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	108	129	108	169	170	148	256	167	121	87	69
2	59	94	204	105	163	168	147	251	174	126	87	65
3	61	94	312	107	208	173	145	254	172	118	84	69
4	61	123	244	107	196	179	147	260	169	118	84	64
5	61	136	230	117	183	178	147	272	175	121	84	65
6	61	107	201	139	186	179	147	258	183	120	79	66
7	61	95	185	123	172	170	144	236	181	115	81	64
8	61	87	169	120	163	168	151	226	169	118	85	81
9	60	88	159	113	157	156	171	229	162	115	79	67
10	60	78	184	119	155	157	174	223	156	114	80	66
11	69	76	166	112	156	155	172	217	156	110	80	66
12	54	71	147	411	151	157	183	218	175	111	68	66
13	54	75	146	850	147	158	195	218	184	109	78	67
14	60	72	140	837	147	193	203	212	179	107	79	67
15	67	71	137	580	146	178	204	209	166	106	75	66
16	61	103	132	539	143	176	211	200	158	106	75	65
17	58	131	127	546	144	178	227	195	156	101	74	65
18	59	136	125	434	154	172	242	202	148	101	77	73
19	104	105	126	370	166	171	250	207	147	100	70	71
20	86	96	123	331	167	177	306	224	142	99	75	69
21	91	96	125	297	157	170	312	220	135	100	72	69
22	74	107	119	275	158	163	281	231	139	100	72	66
23	76	100	116	252	153	163	272	213	146	98	73	66
24	82	346	116	232	156	164	273	200	137	95	69	65
25	123	301	115	217	155	159	259	192	142	95	71	65
26	84	208	106	209	163	150	261	189	126	93	69	64
27	77	170	107	206	168	152	263	179	134	93	69	64
28	82	150	106	192	191	154	294	178	127	91	68	64
29	76	144	100	186	180	150	286	168	124	91	68	63
30	75	127	108	198	---	152	270	165	125	88	68	63
31	116	---	105	179	---	151	---	163	---	87	66	---
TOTAL	2231	3695	4609	8611	4754	5141	6485	6665	4654	3267	2346	2000
MEAN	72.0	123	149	278	164	166	216	215	155	105	75.7	66.7
MAX	123	346	312	850	208	193	312	272	184	126	87	81
MIN	54	71	100	105	143	150	144	163	124	87	66	63
AC-FT	4430	7330	9140	17080	9430	10200	12860	13220	9230	6480	4650	3970

CAL YR 1979 TOTAL 53440 MEAN 146 MAX 665 MIN 54 AC-FT 106000
WTR YR 1980 TOTAL 54458 MEAN 149 MAX 850 MIN 54 AC-FT 108000

14333500 REO BLANKET CREEK NEAR PROSPECT, OR

LOCATION.--Lat 42°46'40", long 122°25'35", in NW¼NE¼ sec.23, T.32 S., R.3 E., Jackson County, Hydrologic Unit 17100307, on right bank 1.8 mi (2.9 km) downstream from Lick Creek, 3.7 mi (6.0 km) northeast of Prospect, and at mile 4.8 (7.7 km).

DRAINAGE AREA.--45.5 mi² (117.8 km²).

PERIOD OF RECORD.--May 1925 to current year.

REVISED RECORDS.--WSP 1318: 1926-28, 1930. WSP 1348: 1943(M), 1948(M), 1953. WSP 1738: 1927(M), drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 2,780 ft (847 m), from river-profile map. Prior to Sept. 7, 1949, nonrecording gage at several sites within 2.5 mi (4.0 km) of present site at various datums.

REMARKS.--Records good. No regulation. Small diversions for irrigation above station.

AVERAGE DISCHARGE.--55 years, 116 ft³/s (3.285 m³/s), 84,040 acre-ft/yr (104 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,190 ft³/s (90.3 m³/s) Dec. 22, 1964, gage height, 7.85 ft (2.393 m), from rating curve extended above 1,500 ft³/s (42.5 m³/s); minimum observed, 34 ft³/s (0.96 m³/s) Sept. 3, 4, 25, Oct. 9, 16, 1931.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft³/s (8.50 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 2	2130	335	9.49	3.35	1.021	Jan. 13	1430	*912	25.8	*4.32	1.317

Minimum, 41 ft³/s (1.16 m³/s) Sept. 26-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	82	84	86	103	106	95	143	108	84	57	48
2	45	76	174	84	103	103	95	138	111	82	57	48
3	44	78	223	82	125	111	95	138	108	80	57	48
4	44	106	174	82	111	111	98	140	106	80	55	46
5	44	114	153	103	108	114	101	145	106	80	55	46
6	45	93	134	103	111	111	101	141	106	80	55	46
7	45	82	125	93	103	106	98	133	106	78	55	46
8	45	78	117	91	101	103	111	128	103	76	55	45
9	44	72	108	88	98	98	128	130	103	76	54	45
10	44	70	122	86	95	98	122	135	103	76	54	45
11	44	67	106	84	95	101	114	130	106	74	54	45
12	44	65	101	364	93	93	117	130	117	74	54	45
13	44	63	95	720	91	103	125	130	111	74	52	45
14	52	62	91	585	91	128	137	130	106	72	52	45
15	52	62	86	349	88	114	131	128	101	72	52	44
16	46	91	84	297	91	106	134	122	101	72	52	44
17	45	101	82	279	93	106	143	122	101	70	52	51
18	57	95	82	231	111	106	147	125	98	70	52	49
19	91	82	82	199	119	106	150	128	98	70	51	48
20	78	78	82	177	119	108	192	134	95	68	51	45
21	68	74	84	160	111	103	181	140	95	68	51	45
22	65	88	80	150	108	103	160	140	95	67	51	44
23	68	88	78	140	103	101	153	131	101	67	49	44
24	72	196	80	134	101	101	153	122	93	65	49	44
25	134	153	76	128	101	101	147	122	95	63	49	42
26	82	122	76	119	108	101	150	119	93	63	49	42
27	72	103	74	117	108	101	156	114	91	62	49	42
28	68	95	74	108	119	101	147	111	88	58	49	42
29	63	91	74	108	108	101	150	108	86	58	49	42
30	68	86	76	103	---	98	150	108	84	58	48	42
31	95	---	84	103	---	98	---	108	---	57	48	---
TOTAL	1853	2713	3161	5553	3016	3241	3981	3973	3015	2194	1617	1353
MEAN	59.8	90.4	102	179	104	105	133	128	101	70.8	52.2	45.1
MAX	134	196	223	720	125	128	192	145	117	84	57	51
MIN	44	62	74	82	88	93	95	108	84	57	48	42
AC-FT	3680	5380	6270	11010	5980	6430	7900	7880	5980	4350	3210	2680

CAL YR 1979 TOTAL 35558 MEAN 97.4 MAX 527 MIN 44 AC-FT 70530
WTR YR 1980 TOTAL 35670 MEAN 97.5 MAX 720 MIN 42 AC-FT 70750

14334700 SOUTH FORK ROGUE RIVER, SOUTH OF PROSPECT, OR

LOCATION.--Lat 42°42'45", long 122°30'20", in NW¼SE¼ sec.7, T.33 S., R.3 E., Jackson County, Hydrologic Unit 17100307, on right bank 200 ft (61 m) upstream from unnamed tributary, 0.6 mi (1.0 km) upstream from Smith Creek, 1.2 mi (1.9 km) downstream from Beaver Creek, 2.8 mi (4.5 km) southwest of Prospect, and at mile 2.4 (3.9 km).

DRAINAGE AREA.--246 mi² (637 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,030 ft (619 m), from topographic map.

REMARKS.--Water-discharge records good. Some regulation by South Fork canal dam upstream. Power diversions above station from South Fork Rogue River, Middle Fork Rogue River, and Red Blanket Creek divert water to Rogue River via Main Canal. During summer base flow all of streamflow is diverted for power except that for fish life. Base flow at station is principally from springs downstream from power diversions.

AVERAGE DISCHARGE.--12 years, 384 ft³/s (10.87 m³/s), 278,200 acre-ft/yr (343 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,880 ft³/s (280 m³/s) Mar. 3, 1972, gage height, 12.71 ft (3.874 m), from floodmark; minimum, 54 ft³/s (1.53 m³/s) Aug. 16-19, 1977; minimum daily, 54 ft³/s (1.53 m³/s) Sept. 24-30, 1970.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1890, 20.1 ft (6.13 m), Dec. 22, 1964, from floodmarks at gage, discharge, 28,500 ft³/s (807 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,520 ft³/s (99.7 m³/s) Jan. 13, gage height, 9.04 ft (2.755 m); minimum, 75 ft³/s (2.12 m³/s) Oct. 13, 14, 16-18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	139	146	112	264	317	282	660	259	135	100	93
2	104	100	276	110	256	305	264	587	282	134	100	93
3	135	106	919	109	392	332	256	494	267	132	100	93
4	130	146	607	110	341	357	256	534	250	132	100	94
5	130	187	599	164	288	366	273	545	253	130	100	97
6	132	158	498	201	314	357	291	514	273	128	100	97
7	132	104	395	172	288	332	293	464	270	128	101	97
8	134	97	311	150	273	314	323	486	250	190	101	118
9	130	92	276	152	259	299	432	475	239	122	101	148
10	130	89	314	156	247	285	446	446	239	122	100	146
11	123	86	279	152	237	288	422	432	231	107	100	146
12	104	85	199	1210	229	267	411	415	299	107	100	148
13	75	132	208	2810	211	314	442	411	311	107	100	148
14	79	196	179	2590	190	564	479	392	288	122	100	148
15	84	174	168	1650	166	530	467	369	261	110	100	146
16	75	113	162	1420	172	498	464	357	239	103	100	145
17	75	201	115	1370	187	486	518	372	229	101	100	143
18	86	216	112	1070	264	435	549	432	213	103	100	166
19	164	125	109	895	344	402	564	428	192	103	100	156
20	162	113	107	791	369	428	702	439	190	100	99	152
21	113	107	130	702	335	405	729	376	192	100	96	148
22	96	118	174	623	332	379	615	344	177	100	94	146
23	97	148	120	576	317	369	587	338	181	100	94	145
24	103	681	118	514	302	350	591	308	160	100	94	141
25	256	800	118	471	305	338	568	276	160	100	94	141
26	162	538	112	439	341	335	564	250	162	100	94	143
27	97	335	104	395	357	320	587	237	158	100	94	143
28	94	223	101	320	408	299	664	239	152	100	94	139
29	90	226	101	285	360	285	648	264	145	100	94	141
30	97	172	104	288	---	273	664	256	137	100	94	135
31	152	---	110	273	---	282	---	242	---	100	94	---
TOTAL	3626	6007	7271	20280	8348	11111	14351	12382	6659	3516	3038	3996
MEAN	117	200	235	654	288	358	478	399	222	113	98.0	133
MAX	256	800	919	2810	408	564	729	660	311	190	101	166
MIN	75	85	101	109	166	267	256	237	137	100	94	93
AC-FT	7190	11910	14420	40230	16560	22040	28470	24560	13210	6970	6030	7930

CAL YR 1979 TOTAL 106305 MEAN 291 MAX 2800 MIN 75 AC-FT 210900
WTR YR 1980 TOTAL 100585 MEAN 275 MAX 2810 MIN 75 AC-FT 199500

14334700 SOUTH FORK ROGUE RIVER SOUTH OF PROSPECT, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1968 to current year.
SEDIMENT RECORDS: October 1976 to current year (October to April only 1980 water year).

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 20.0°C July 18, 19, 1979; minimum, 0.0°C on several days during winter periods.
SEDIMENT CONCENTRATIONS: Maximum daily, 654 mg/l Nov. 26, 1977; minimum daily, 0 mg/l on several days each year.
SEDIMENT DISCHARGE: Maximum daily, 6,180 tons (5,610 tonnes); minimum daily, 0 tons (0 tonnes) on several days each year.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 14.5°C Aug. 21-25, was probably higher during period of missing record June to August; minimum, 0.0°C Jan. 28-30.
SEDIMENT CONCENTRATIONS: Maximum daily, 279 mg/l Jan. 13; minimum daily, 0 mg/l several days during period.
SEDIMENT DISCHARGE: Maximum daily, 2,280 tons (2,070 tonnes) Jan. 13; minimum daily, 0 tons (0 tonnes) several days during period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
JAN					
12...	0730	677	92	168	81
12...	1220	2200	112	665	58
12...	1330	751	132	268	56
12...	1730	1880	303	1540	56
12...	1900	2100	233	1320	58
12...	2030	2180	267	1570	35
12...	2200	2210	103	615	76
13...	0100	2200	150	891	47
13...	0230	2180	140	824	49
13...	0400	2250	157	954	47
13...	0600	2340	161	1020	55
13...	0730	2330	174	1100	50
13...	0900	2370	137	877	57
13...	1030	2510	184	1250	49
13...	1200	2730	262	1930	44
13...	1330	3030	362	2960	45
13...	1500	3430	523	4840	39
13...	1630	3470	549	5140	43
13...	1800	3380	518	4730	32
JAN					
13...	1930	3290	248	2200	52
13...	2100	3200	321	2770	37
13...	2230	3280	330	2920	35
13...	2400	3400	246	2260	42
14...	0130	3300	247	2200	44
14...	0300	3220	332	2890	31
14...	0430	3020	219	1790	46
14...	0600	2890	265	2070	38
14...	0730	2760	197	1470	42
14...	0900	2620	224	1590	37
14...	1100	2480	198	1330	35
14...	1230	2290	130	804	49
14...	1400	2270	105	644	47
14...	1530	2280	119	733	41
14...	1700	2370	151	966	34
14...	1830	2360	97	618	59
14...	2000	2280	130	800	42
15...	1230	1590	62	266	36

14334700 SOUTH FORK ROGUE RIVER SOUTH OF PROSPECT, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	11.5	9.0	7.5	5.5	5.5	4.0	6.0	5.5	5.0	3.5	7.0	4.5
2	11.5	9.5	8.0	7.0	6.0	5.5	5.5	4.0	5.0	4.5	8.0	5.5
3	11.5	9.5	8.0	7.0	6.0	4.5	6.0	5.0	5.5	5.0	7.0	6.0
4	11.0	9.5	8.0	7.5	5.5	4.5	6.0	5.0	5.0	3.5	7.5	5.5
5	11.5	9.5	8.0	6.5	4.5	3.5	6.5	6.0	5.0	4.0	7.0	5.5
6	11.5	10.5	7.5	6.5	4.5	3.5	6.0	4.5	5.5	4.5	7.0	5.0
7	11.5	9.5	7.5	6.0	5.0	3.5	5.0	4.0	4.5	3.0	7.0	4.5
8	10.5	9.0	6.5	5.0	5.0	4.0	5.5	4.5	4.5	2.5	7.0	4.5
9	10.5	8.5	6.0	4.5	6.0	4.0	5.5	4.5	4.5	3.0	7.0	4.0
10	10.0	8.5	5.0	4.0	6.0	3.5	4.5	2.5	5.5	4.0	7.5	4.0
11	10.5	8.0	5.0	4.0	3.5	2.0	4.0	2.5	5.0	3.0	6.5	4.5
12	10.5	8.5	5.0	3.5	3.5	2.5	5.5	4.0	5.0	3.0	5.5	4.0
13	11.0	9.5	5.0	4.0	3.5	2.0	5.0	4.5	5.0	3.0	5.5	4.5
14	11.0	10.0	5.0	4.0	3.0	2.0	5.5	4.5	5.0	3.5	5.5	4.5
15	10.5	10.0	6.5	4.0	2.5	1.5	5.5	4.0	6.5	4.5	4.5	3.0
16	10.0	8.5	7.0	6.5	3.5	2.0	5.5	5.0	6.0	5.5	6.0	3.0
17	10.0	9.0	7.0	6.5	5.0	4.0	5.5	4.0	7.0	5.5	5.5	4.0
18	10.0	9.0	6.5	4.5	6.0	5.0	4.0	3.0	6.5	5.5	6.5	4.0
19	9.0	7.5	5.5	4.5	6.5	5.5	3.5	2.0	6.0	5.5	7.5	4.0
20	7.5	6.5	5.0	4.0	6.5	5.5	4.0	2.5	6.0	5.0	6.5	4.5
21	8.0	6.5	4.5	3.0	6.0	4.5	4.0	3.0	5.5	4.5	5.0	3.5
22	8.5	7.5	5.5	4.5	4.5	4.0	4.5	3.5	5.5	4.5	7.0	3.5
23	9.5	8.0	4.5	4.0	4.0	3.5	4.5	3.5	5.5	3.5	7.0	4.0
24	9.5	8.5	5.0	4.5	4.5	4.0	4.5	3.5	7.0	5.0	7.0	3.5
25	9.5	8.0	4.5	3.5	4.5	4.0	4.0	3.0	6.5	5.0	7.5	4.5
26	8.5	6.5	4.0	3.5	4.5	3.5	3.5	2.0	7.0	6.0	6.0	5.0
27	9.0	7.5	3.5	2.0	3.5	2.5	3.0	2.0	7.5	6.5	7.0	4.5
28	8.5	7.5	4.5	3.0	4.0	2.5	2.0	.0	7.0	6.0	7.5	3.5
29	7.5	6.5	5.0	3.5	4.5	4.0	1.0	.0	7.0	4.5	7.5	4.0
30	7.5	6.5	5.0	3.5	5.0	4.0	2.0	.0	---	---	7.5	4.5
31	8.5	7.5	---	---	6.0	5.0	3.5	2.0	---	---	5.5	4.0
MONTH	11.5	6.5	8.0	2.0	6.5	1.5	6.5	.0	7.5	2.5	8.0	3.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.0	4.0	---	---	11.5	9.0			---	---	13.0	9.5
2	7.0	3.5	---	---	9.5	7.0			---	---	13.0	10.5
3	---	---	---	---	10.5	7.0			---	---	13.0	9.0
4	---	---	---	---	10.0	7.0			---	---	14.0	10.0
5	---	---	---	---	11.5	7.5			---	---	14.0	10.5
6	---	---	9.5	---	10.5	8.0			---	---	14.0	11.0
7	---	---	11.0	5.5	12.5	8.5			---	---	13.5	11.0
8	---	---	8.5	6.5	---	---			---	---	13.5	10.0
9	---	---	7.0	6.0	---	---			---	---	13.0	10.5
10	---	---	6.0	5.0	---	---			---	---	13.5	10.5
11	---	---	8.5	5.5	---	---			---	---	13.0	10.5
12	---	---	10.0	6.5	---	---			---	---	12.5	10.5
13	---	---	9.5	7.0	---	---			---	---	11.5	9.5
14	---	---	10.0	7.0	---	---			---	---	9.5	8.0
15	---	---	11.0	5.5	---	---			---	---	10.5	7.5
16	---	---	11.0	5.5	---	---			---	---	11.0	8.0
17	---	---	12.0	6.5	---	---			---	---	11.5	9.0
18	---	---	12.5	7.5	---	---			---	---	11.5	10.5
19	---	---	13.5	8.0	---	---			---	---	11.5	9.5
20	---	---	13.0	8.0	---	---			---	---	11.0	10.0
21	---	---	13.0	8.5	---	---			14.5	---	10.0	7.5
22	---	---	10.0	7.0	---	---			14.5	10.5	10.0	7.0
23	---	---	8.5	6.0	---	---			14.5	11.0	10.5	8.0
24	---	---	8.0	6.0	---	---			14.5	11.0	10.5	8.5
25	---	---	8.5	6.0	---	---			14.5	11.0	11.0	8.5
26	---	---	9.0	6.0	---	---			14.0	10.5	11.5	9.5
27	---	---	11.5	6.5	---	---			13.5	11.0	11.0	9.0
28	---	---	12.0	7.0	---	---			13.0	10.0	10.5	8.5
29	---	---	13.0	7.0	---	---			12.5	9.5	10.0	8.0
30	---	---	13.5	8.0	---	---			12.5	8.5	10.5	8.0
31	---	---	14.0	8.0	---	---			13.0	10.0	---	---
MONTH	7.0	3.5	14.0	5.0	12.5	7.0			14.5	8.5	14.0	7.0

14334700 SOUTH FORK ROGUE RIVER SOUTH OF PROSPECT, OR--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCTOBER MEAN CONCEN-TRATION (MG/L)	OCTOBER LOADS (T/DAY)	NOVEMBER MEAN CONCEN-TRATION (MG/L)	NOVEMBER LOADS (T/DAY)	DECEMBER MEAN CONCEN-TRATION (MG/L)	DECEMBER LOADS (T/DAY)	JANUARY MEAN CONCEN-TRATION (MG/L)	JANUARY LOADS (T/DAY)	FEBRUARY MEAN CONCEN-TRATION (MG/L)	FEBRUARY LOADS (T/DAY)	MARCH MEAN CONCEN-TRATION (MG/L)	MARCH LOADS (T/DAY)
1	2	.46	5	1.9	6	2.4	---	.91	---	.70	3	2.6
2	2	.56	1	.27	16	24	---	.90	---	.70	4	3.3
3	5	1.8	3	.86	39	109	---	.88	---	13	5	4.5
4	---	1.0	5	2.0	9	15	---	.89	---	1.5	5	4.8
5	6	.80	3	1.5	8	13	---	6.1	---	.80	4	4.0
6	4	1.4	0	.00	7	9.4	---	3.3	---	.80	7	6.7
7	2	.71	2	.56	7	7.5	6	2.8	0	.00	5	4.5
8	2	.72	2	.52	6	5.0	5	2.0	1	.74	7	5.9
9	1	.35	2	.50	5	3.7	3	1.2	0	.00	10	8.1
10	1	.35	3	.72	5	4.2	4	1.7	4	2.7	7	5.4
11	2	.67	2	.47	7	5.3	5	2.1	4	2.6	6	4.7
12	4	1.1	2	.46	---	4.0	130	546	10	6.2	6	4.3
13	5	1.0	3	1.1	7	3.9	279	2280	4	2.3	7	5.9
14	2	.43	5	2.7	7	3.4	178	1300	4	2.0	26	42
15	3	.68	4	1.9	6	2.7	60	267	4	1.8	11	16
16	2	.40	2	.61	4	1.7	32	123	3	1.4	10	13
17	3	.60	8	4.3	4	1.2	27	100	2	1.0	7	9.2
18	6	1.4	8	4.7	3	.91	27	78	10	7.1	6	7.1
19	13	5.8	4	1.3	4	1.2	18	43	9	8.4	5	5.4
20	8	3.5	4	1.2	6	1.7	---	26	9	9.0	8	9.3
21	7	2.1	3	.87	8	2.8	---	13	7	6.3	8	8.7
22	7	1.8	10	3.2	5	2.4	---	6.7	7	6.3	6	6.1
23	4	1.0	6	2.4	4	1.3	---	11	5	4.3	7	7.0
24	3	.83	70	163	5	1.6	---	4.2	4	3.3	6	5.7
25	15	12	20	45	4	1.3	---	2.5	6	4.9	4	3.6
26	7	3.1	12	17	4	1.2	---	2.4	5	4.6	6	5.4
27	5	1.3	36	34	3	.85	---	2.1	4	3.9	4	3.5
28	4	1.0	---	13	---	.82	---	1.7	8	8.8	6	4.8
29	3	.73	5	3.1	---	.82	---	1.5	3	2.9	5	3.8
30	3	.79	---	2.8	---	.84	---	1.6	---	---	2	1.5
31	7	3.1	---	---	---	.89	---	.70	---	---	2	1.5
TOTAL	---	51.48	---	311.94	---	234.03	---	4833.18	---	108.04	---	218.3

DAY	APRIL MEAN CONCEN-TRATION (MG/L)	APRIL LOADS (T/DAY)	MAY MEAN CONCEN-TRATION (MG/L)	MAY LOADS (T/DAY)	JUNE MEAN CONCEN-TRATION (MG/L)	JUNE LOADS (T/DAY)	JULY MEAN CONCEN-TRATION (MG/L)	JULY LOADS (T/DAY)	AUGUST MEAN CONCEN-TRATION (MG/L)	AUGUST LOADS (T/DAY)	SEPTEMBER MEAN CONCEN-TRATION (MG/L)	SEPTEMBER LOADS (T/DAY)
1	3	2.3										
2	4	2.9										
3	5	3.5										
4	3	2.1										
5	4	2.9										
6	5	3.9										
7	4	3.2										
8	5	4.4										
9	6	7.0										
10	3	3.6										
11	4	4.6										
12	7	7.8										
13	7	8.4										
14	5	6.5										
15	3	3.8										
16	5	6.3										
17	7	9.8										
18	8	12										
19	11	17										
20	24	47										
21	13	25										
22	7	12										
23	5	7.9										
24	8	13										
25	6	9.2										
26	5	7.6										
27	6	9.5										
28	19	35										
29	9	16										
30	7	13										
31	---	---										
TOTAL	---	307.2										

14335040 LOST CREEK LAKE NEAR MCLEOD, OR

LOCATION.--Lat 42°40'16", long 122°40'25", in SW¼ sec.26, T.33 S., R. 1 E., Jackson County, Hydrologic Unit 17100307, in outlet structure of Lost Creek Dam on Rogue River, 1.0 mi (1.6 km) northeast of McLeod and at mile 157.2 (252.9 km).

DRAINAGE AREA.--674 mi² (1,746 km²).

PERIOD OF RECORD.--February 1977 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Nov. 28, 1977, nonrecording gage at same site and datum.

REMARKS.--Reservoir is formed by earthfill dam completed in October 1976. Storage began in February 1977. Total capacity, 465,000 acre-ft (573 hm³) between elevations 1,551.0 ft (472.74 m) and 1,872.0 ft (570.59 m), maximum pool elevation. Elevation of gated spillway crest, 1,823.0 ft (555.65 m). Usable storage, 315,000 acre-ft (388 hm³) between elevation 1,751.0 ft (533.70 m) and 1,872.0 ft (570.59 m). Water is used for flood control, recreation, power generation, pollution abatement, domestic use and other purposes.

COOPERATION.--Capacity table furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 465,100 acre-ft (573 hm³) May 21, 1979, elevation, 1,872.02 ft (570.592 m); minimum since first filling, 100,800 acre-ft (124 hm³) Oct. 29, 1977, elevation, 1,720.50 ft (524.408 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 465,000 acre-ft (573 hm³) May 22, elevation, 1,871.99 ft (570.583 m); minimum, 273,800 acre-ft (338 hm³) Oct. 18, elevation, 1,807.65 ft (550.972 m).

Capacity table (elevation, in feet, and contents, in acre-feet)

1,720.0	100,100	1,850.0	393,100
1,750.0	148,200	1,872.0	465,000
1,800.0	254,600		

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1809.39	1811.34	1813.54	1812.81	1825.23	1848.12	1862.17	1870.84	1871.12	1865.30	1847.03	1825.65
2	1809.22	1811.53	1813.87	1813.24	1825.90	1848.95	1862.46	1870.81	1871.19	1864.93	1846.24	1825.17
3	1809.13	1811.69	1814.67	1813.60	1826.91	1849.91	1862.80	1870.79	1871.23	1864.51	1845.44	1824.70
4	1809.00	1812.07	1813.99	1813.94	1827.81	1850.87	1863.16	1870.78	1871.26	1864.08	1844.63	1824.24
5	1808.88	1812.32	1813.28	1814.57	1828.63	1851.66	1863.60	1870.77	1871.28	1863.64	1843.82	1823.77
6	1808.76	1811.96	1812.97	1815.33	1829.49	1852.28	1864.16	1870.76	1871.30	1863.19	1843.00	1823.29
7	1808.64	1811.80	1812.58	1815.89	1830.25	1852.83	1864.64	1870.59	1871.34	1862.73	1842.18	1822.82
8	1808.52	1811.89	1812.40	1816.35	1830.97	1853.34	1865.19	1870.45	1871.35	1862.27	1841.38	1822.51
9	1808.40	1812.00	1812.38	1816.78	1831.67	1853.80	1865.91	1870.51	1871.35	1861.80	1840.54	1822.30
10	1808.27	1812.08	1812.42	1816.96	1832.31	1854.23	1866.37	1870.62	1871.33	1861.35	1839.71	1822.10
11	1808.14	1812.14	1812.35	1816.68	1832.95	1854.66	1866.79	1870.65	1871.14	1860.87	1838.89	1821.88
12	1808.01	1812.16	1812.28	1819.84	1833.54	1855.05	1867.06	1870.68	1870.98	1860.41	1838.04	1821.68
13	1807.91	1812.17	1812.17	1827.79	1834.12	1855.60	1867.51	1870.84	1870.82	1859.90	1837.19	1821.48
14	1807.89	1812.19	1812.10	1834.23	1834.67	1856.61	1867.99	1871.19	1870.66	1859.42	1836.34	1821.27
15	1807.90	1812.20	1812.12	1833.93	1835.20	1857.02	1868.37	1871.59	1870.46	1858.91	1835.51	1821.07
16	1807.80	1812.38	1812.10	1831.59	1835.73	1857.23	1868.74	1871.72	1870.23	1858.33	1834.66	1820.86
17	1807.70	1812.82	1812.09	1828.89	1836.30	1857.50	1869.10	1871.75	1869.98	1857.77	1833.78	1820.65
18	1807.69	1813.29	1812.09	1826.19	1837.12	1857.78	1869.31	1871.80	1869.68	1857.11	1832.92	1820.52
19	1808.18	1813.51	1812.08	1824.94	1838.20	1858.01	1869.50	1871.85	1869.35	1856.44	1832.04	1820.38
20	1808.50	1813.58	1812.09	1824.36	1839.26	1858.33	1870.13	1871.92	1869.03	1855.79	1831.25	1820.21
21	1808.69	1813.62	1812.22	1824.09	1840.18	1858.58	1870.35	1871.97	1868.71	1855.12	1830.62	1820.01
22	1808.75	1813.83	1812.21	1823.96	1841.09	1858.76	1870.09	1871.98	1868.40	1854.44	1830.15	1819.82
23	1808.89	1814.14	1812.17	1823.70	1841.90	1858.93	1870.09	1871.88	1868.08	1853.75	1829.73	1819.64
24	1809.06	1815.45	1812.14	1823.36	1842.67	1859.22	1870.24	1871.73	1867.75	1853.04	1829.34	1819.42
25	1809.90	1816.26	1812.08	1822.96	1843.44	1859.63	1870.34	1871.44	1867.44	1852.30	1828.94	1819.24
26	1810.22	1816.03	1812.05	1822.90	1844.24	1860.07	1870.40	1871.19	1867.12	1851.58	1828.46	1819.02
27	1810.39	1815.54	1812.07	1822.90	1845.16	1860.47	1870.50	1871.03	1866.77	1850.84	1828.00	1818.81
28	1810.51	1814.95	1812.13	1823.16	1846.23	1860.82	1870.67	1871.02	1866.43	1850.11	1827.53	1818.60
29	1810.57	1814.28	1812.12	1823.57	1847.23	1861.17	1870.81	1871.04	1866.06	1849.34	1827.04	1818.38
30	1810.69	1813.90	1812.16	1824.00	---	1861.50	1870.86	1871.07	1865.70	1848.60	1826.58	1818.17
31	1811.04	---	1812.36	1824.53	---	1861.85	---	1871.10	---	1847.82	1826.12	---
MEAN	1808.92	1813.10	1812.49	1821.84	1835.81	1856.28	1867.64	1871.17	1869.58	1857.60	1835.39	1821.26
MAX	1811.04	1816.26	1814.67	1834.23	1847.23	1861.85	1870.86	1871.98	1871.35	1865.30	1847.03	1825.65
MIN	1807.69	1811.34	1812.05	1812.81	1825.23	1848.12	1862.17	1870.45	1865.70	1847.82	1826.12	1818.17
(†)	282500	290000	285900	318600	384500	430900	461100	461900	443700	386400	322900	301300
(‡)	+3700	+7500	-4100	+32700	+65900	+46400	+30200	+800	-18200	-57300	-63500	-21600

CAL YR 1979 MEAN 1837.34 MAX 1871.98 MIN 1807.69 AC-FT‡ +2200
WTR YR 1980 MEAN 1839.24 MAX 1871.98 MIN 1807.69 AC-FT‡ +22500

† Contents, in acre-feet, at 2400, on last day of month.
‡ Change in contents in acre-feet.

14335075 ROGUE RIVER AT MCLEOD, OR

LOCATION.--Lat 42°39'35", long 122°41'30", in SW¼NW¼ sec.34, T.33 S., R.1 E., Jackson County, Hydrologic Unit 17100307, on right bank 0.3 mi (0.5 km) upstream from mouth of Big Butte Creek, 0.1 (0.2 km) southwest of McLeod, and at mile 155.6 (250.4 km).

DRAINAGE AREA.--690 mi^2 (1,787 km^2), approximately.

PERIOD OF RECORD.--May 1973 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1976 to current year.
pH: November 1976 to current year.
WATER TEMPERATURES: November 1976 to current year.
DISSOLVED OXYGEN: November 1976 to current year.
SUSPENDED SEDIMENT DISCHARGE: October 1976 to current year (October to April only, 1980 water year).

INSTRUMENTATION.--Water-quality monitor and automatic pumping sediment sampler since November 1976.

REMARKS.--Water-discharge records, obtained by subtracting big Butte Creek near McLeod (station 14337500) from Rogue River near McLeod (station 14337600), are used for computation of daily sediment loads.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 76 micromhos Nov. 11, 1977; minimum, 45 micromhos Dec. 24, 25, 1977.
pH: Maximum, 8.8 units May 28, 1980; minimum, 6.7 units Nov. 8-13, 1978.
WATER TEMPERATURES: Maximum, 14.5°C on several days in August and September 1977, and July 1979; minimum, 0.5°C Jan. 9, 1977 (prior to storage in Lost Creek Reservoir).
DISSOLVED OXYGEN: Maximum, 15.7 mg/l Jan. 8, 1977; minimum, 6.8 mg/l Aug. 20, 1977.
SEDIMENT CONCENTRATIONS: Maximum daily mean (water years 1977-79), 73 mg/l Dec. 14, 1977; minimum daily, 0 mg/l June 19, 1978, and many days during 1979. Maximum daily mean (period October 1979 to April 1980), 32 mg/l Oct. 15, 1979; minimum daily mean, 1 mg/l many days throughout period.
SEDIMENT DISCHARGE: Maximum daily (water years 1977-79), 1,570 tons (1,420 tonnes) Dec. 14, 1977; minimum daily, 0 tons (0 tonnes) June 19, 1978, and many days during 1979. Maximum daily (period October 1979 to April 1980), 498 tons (452 tonnes) Jan. 15, 1980; minimum daily, 2.7 tons (2.4 tonnes) Oct. 12.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 71 micromhos Oct. 19; minimum, 52 micromhos Apr. 30, May 1.
pH: Maximum, 8.8 units May 28; minimum, 7.1 units many days in October, November, and September.
WATER TEMPERATURES: Maximum, 14.0°C June 20-22, July 1, 2, 5, 7, 8; minimum, 4.5°C Jan. 29, 30, and many days in February and March.
DISSOLVED OXYGEN: Maximum, 13.6 mg/l Jan. 16; minimum recorded, 8.6 mg/l Sept. 19, 20.
SEDIMENT CONCENTRATIONS: Maximum daily mean (October to April), 32 mg/l Oct. 15; minimum daily mean, 1 mg/l many days throughout period.
SEDIMENT DISCHARGE: Maximum daily (October to April), 498 tons (452 tonnes) Jan. 15; minimum daily, 2.7 tons (2.4 tonnes) Oct. 12.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	64	63	62	57	56	55	58	58	58	60	---
2	60	63	63	62	56	56	55	56	56	58	60	---
3	60	64	63	63	56	56	55	57	57	58	60	---
4	60	64	63	64	57	56	55	58	58	58	60	---
5	60	64	63	64	57	56	55	57	57	58	60	---
6	60	65	63	64	57	56	54	54	57	58	60	60
7	60	65	63	64	57	56	54	54	57	58	60	60
8	60	64	62	64	57	55	55	54	57	58	60	60
9	60	64	62	64	57	56	55	55	57	58	61	60
10	60	64	62	63	57	55	54	56	57	58	61	60
11	61	64	62	63	57	56	54	56	57	58	61	60
12	61	64	62	64	57	56	54	56	57	58	61	61
13	61	64	61	66	57	56	54	56	57	58	61	---
14	61	64	60	66	57	56	53	56	57	58	61	---
15	61	64	60	64	56	56	53	56	57	58	61	---
16	61	64	60	62	56	55	53	56	57	58	61	---
17	62	65	59	61	56	55	54	56	57	58	61	---
18	62	65	59	61	56	56	55	56	57	58	61	---
19	64	65	59	60	57	55	55	56	57	58	61	60
20	63	65	60	58	57	55	55	56	57	58	61	60
21	63	65	60	58	57	55	54	56	57	58	62	60
22	62	65	60	58	56	55	54	56	57	59	62	60
23	61	65	60	58	57	55	54	56	57	59	---	59
24	61	66	60	57	57	56	54	56	57	59	---	59
25	62	66	60	58	56	56	54	56	57	59	---	59
26	61	65	60	57	56	56	54	56	57	59	---	59
27	61	64	61	57	56	55	53	56	57	59	---	60
28	62	64	61	58	57	55	53	56	57	59	---	60
29	62	64	60	57	56	55	53	58	57	59	---	60
30	62	64	60	57	---	55	53	57	57	60	---	60
31	63	---	60	56	---	55	---	57	---	60	---	---
MEAN	61	64	61	61	57	56	54	56	57	58	61	60

14335075 ROGUE RIVER AT MCLEOD, OR--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.3	7.1	7.7	7.2	7.5	7.4	7.4	7.3	7.6	7.5	7.8	7.5
2	7.3	7.1	7.2	7.1	7.4	7.4	7.4	7.2	7.5	7.5	8.0	7.5
3	7.3	7.1	7.2	7.1	7.5	7.4	7.4	7.2	7.5	7.5	7.8	7.5
4	7.3	7.1	7.2	7.1	7.5	7.4	7.4	7.3	7.6	7.5	8.0	7.5
5	7.3	7.1	7.3	7.1	7.5	7.4	7.4	7.3	7.5	7.5	7.9	7.5
6	7.3	7.1	7.6	7.2	7.5	7.4	7.5	7.3	7.6	7.5	7.8	7.5
7	7.4	7.2	7.3	7.2	7.5	7.4	7.4	7.3	7.6	7.5	7.8	7.4
8	7.3	7.1	7.3	7.2	7.5	7.4	7.4	7.3	7.6	7.5	7.8	7.4
9	7.3	7.1	7.3	7.2	7.5	7.4	7.4	7.3	7.6	7.5	7.8	7.4
10	7.3	7.1	7.3	7.2	7.5	7.4	7.5	7.4	7.6	7.5	7.8	7.4
11	7.3	7.1	7.3	7.2	7.5	7.5	7.5	7.4	7.6	7.5	7.7	7.4
12	7.3	7.1	7.3	7.2	7.5	7.5	7.4	7.4	7.6	7.5	7.7	7.4
13	7.3	7.1	7.3	7.2	7.5	7.4	7.5	7.4	7.6	7.5	7.7	7.4
14	7.2	7.1	7.3	7.2	7.5	7.4	7.4	7.3	7.6	7.5	7.8	7.4
15	7.3	7.1	7.3	7.2	7.5	7.4	7.6	7.3	7.6	7.5	7.6	7.4
16	7.3	7.1	7.2	7.2	7.5	7.3	7.6	7.5	7.7	7.5	7.6	7.4
17	7.4	7.1	7.4	7.2	7.4	7.3	7.6	7.6	7.6	7.5	7.6	7.4
18	7.3	7.1	7.4	7.2	7.4	7.3	7.6	7.5	7.6	7.5	7.6	7.4
19	7.5	7.2	7.4	7.2	7.5	7.3	7.6	7.5	7.6	7.5	7.6	7.4
20	7.3	7.2	7.4	7.3	7.4	7.3	7.5	7.5	7.7	7.5	7.6	7.4
21	7.3	7.2	7.4	7.2	7.4	7.3	7.5	7.4	7.7	7.5	7.6	7.4
22	7.5	7.1	7.4	7.4	7.5	7.3	7.5	7.5	7.7	7.5	7.7	7.4
23	7.2	7.1	7.4	7.3	7.4	7.3	7.5	7.5	7.8	7.5	7.6	7.4
24	7.2	7.1	7.4	7.3	7.5	7.3	7.5	7.4	7.8	7.5	7.7	7.4
25	7.3	7.1	7.3	7.3	7.5	7.4	7.5	7.5	7.8	7.5	7.8	7.4
26	7.3	7.1	7.4	7.3	7.5	7.4	7.5	7.5	7.8	7.5	7.6	7.4
27	7.2	7.1	7.4	7.4	7.5	7.4	7.5	7.5	7.7	7.5	7.7	7.4
28	7.3	7.1	7.4	7.4	7.5	7.3	7.6	7.5	8.0	7.5	7.8	7.4
29	7.3	7.1	7.4	7.4	7.5	7.4	7.6	7.5	7.9	7.5	7.8	7.4
30	7.6	7.1	7.5	7.4	7.5	7.3	7.6	7.5	---	---	7.7	7.4
31	7.7	7.5	---	---	7.4	7.3	7.5	7.5	---	---	7.7	7.4
MONTH	7.7	7.1	7.7	7.1	7.5	7.3	7.6	7.2	8.0	7.5	8.0	7.4

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.7	7.4	7.7	7.5	8.6	7.8	8.1	7.3	7.4	7.3	---	---
2	7.8	7.4	7.7	7.5	8.5	7.8	8.0	7.5	7.4	7.3	---	---
3	7.7	7.4	7.7	7.5	8.5	8.0	8.0	7.5	7.4	7.3	---	---
4	7.7	7.4	7.7	7.5	8.6	8.1	8.0	7.5	7.4	7.3	---	---
5	7.7	7.4	7.7	7.5	8.5	7.9	8.0	7.5	7.4	7.2	---	---
6	7.7	7.4	7.7	7.5	8.5	7.9	7.9	7.5	7.4	7.2	7.4	7.2
7	7.8	7.4	7.7	7.5	8.5	7.9	7.9	7.5	7.4	7.2	7.4	7.1
8	7.7	7.4	7.7	7.5	8.5	7.8	7.7	7.4	7.4	7.2	7.4	7.1
9	7.7	7.4	7.7	7.5	8.3	7.6	7.6	7.3	7.4	7.2	7.4	7.1
10	7.7	7.4	7.6	7.5	8.4	7.8	7.6	7.3	7.4	7.2	7.4	7.1
11	7.6	7.4	7.7	7.5	8.2	7.7	7.6	7.3	7.4	7.2	7.4	7.1
12	7.7	7.4	7.8	7.5	8.1	7.7	7.6	7.3	7.4	7.2	7.4	7.1
13	7.7	7.4	7.9	7.5	8.2	7.8	7.6	7.3	7.4	7.2	---	---
14	7.6	7.4	8.0	7.6	8.1	7.6	7.5	7.3	7.4	7.3	---	---
15	7.7	7.4	8.0	7.6	8.2	7.7	7.5	7.3	7.4	7.3	---	---
16	7.7	7.4	8.1	7.6	8.0	7.6	7.5	7.3	7.4	7.3	---	---
17	7.7	7.5	8.1	7.6	8.1	7.6	7.5	7.3	7.4	7.2	---	---
18	7.6	7.4	8.1	7.6	8.1	7.6	7.5	7.3	7.4	7.2	---	---
19	7.6	7.4	8.2	7.7	8.4	7.6	7.5	7.3	7.4	7.2	7.4	7.2
20	7.6	7.4	8.2	7.6	8.4	7.7	7.5	7.3	7.4	7.2	7.4	7.2
21	7.6	7.5	8.2	7.7	8.4	7.7	7.5	7.3	7.5	7.3	7.5	7.2
22	7.6	7.5	8.1	7.7	8.4	7.7	7.5	7.3	7.5	7.2	7.5	7.2
23	7.6	7.5	8.2	7.7	8.2	7.7	7.5	7.3	---	---	7.4	7.2
24	7.7	7.5	8.4	7.8	7.9	7.4	7.5	7.3	---	---	7.4	7.2
25	7.7	7.5	8.2	7.8	7.7	7.4	7.5	7.3	---	---	7.4	7.2
26	7.7	7.5	8.2	7.8	7.7	7.4	7.5	7.3	---	---	7.4	7.2
27	7.7	7.5	8.7	7.9	7.8	7.4	7.5	7.3	---	---	7.4	7.2
28	7.7	7.5	8.8	8.2	7.7	7.4	7.5	7.3	---	---	7.4	7.2
29	7.7	7.5	8.7	8.2	7.7	7.4	7.5	7.3	---	---	7.4	7.2
30	7.7	7.5	8.7	8.1	7.7	7.4	7.5	7.3	---	---	7.4	7.1
31	---	---	8.7	7.8	---	---	7.4	7.2	---	---	---	---
MONTH	7.8	7.4	8.8	7.5	8.6	7.4	8.1	7.2	7.5	7.2	7.5	7.1

14335075 ROGUE RIVER AT MCLEOD, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	10.0	8.5	7.5	6.5	7.0	7.0	5.5	5.5	5.5	5.0	5.0	4.5
2	9.5	8.5	7.0	6.5	7.0	7.0	5.5	5.0	5.0	5.0	5.5	4.5
3	10.0	8.5	7.0	7.0	7.5	7.0	5.5	5.5	5.0	4.5	5.0	4.5
4	10.0	8.5	7.0	6.5	7.5	7.0	5.5	5.5	5.5	4.5	6.0	4.5
5	10.0	8.5	8.0	7.0	7.0	7.0	5.5	5.5	5.0	5.0	5.5	4.5
6	9.5	9.0	8.5	8.0	7.0	7.0	5.5	5.0	5.0	4.5	5.0	4.5
7	10.0	8.5	8.5	7.0	7.0	6.5	5.5	5.0	5.5	4.5	5.5	4.5
8	9.5	8.0	8.0	7.0	7.0	6.5	5.5	5.0	5.5	4.5	5.5	4.5
9	9.0	8.0	7.5	6.5	6.5	6.5	5.5	5.0	5.5	4.5	5.5	4.5
10	9.0	8.0	7.5	7.0	6.5	6.5	5.5	5.0	5.5	4.5	5.5	4.5
11	9.0	8.0	7.5	7.0	6.5	6.0	6.0	5.5	5.5	4.5	5.5	4.5
12	8.5	7.5	7.5	7.0	6.5	6.0	5.5	5.5	5.0	4.5	5.0	4.5
13	8.5	7.5	7.5	7.0	6.5	6.0	6.0	5.5	5.5	4.5	5.5	4.5
14	8.0	7.5	7.5	7.0	6.5	6.0	5.5	5.5	5.0	4.5	5.5	4.5
15	8.5	7.5	7.0	7.0	6.0	5.5	6.0	5.5	5.5	4.5	5.0	4.5
16	8.5	7.5	7.0	7.0	6.0	5.5	6.0	5.5	5.5	4.5	5.5	5.0
17	8.5	7.5	7.5	7.0	6.0	5.5	6.0	5.5	5.5	4.5	5.0	4.5
18	8.0	7.0	7.5	6.5	6.0	5.5	6.0	6.0	5.0	4.5	5.5	4.5
19	8.0	7.5	7.0	6.5	6.0	5.5	6.0	6.0	5.0	5.0	5.5	5.0
20	7.5	7.5	7.5	7.0	6.0	5.5	6.0	5.5	5.0	4.5	6.0	5.0
21	8.0	7.5	7.5	6.5	5.5	5.5	5.5	5.5	5.0	4.5	5.5	5.0
22	7.5	6.5	7.0	7.0	6.0	5.5	5.5	5.5	5.0	4.5	6.0	5.0
23	7.0	6.5	7.0	7.0	6.0	5.5	6.0	5.5	5.5	4.5	6.0	5.0
24	7.0	6.5	7.0	6.5	6.0	5.5	5.5	5.5	6.0	5.5	6.0	5.0
25	7.0	6.5	7.0	6.5	6.0	5.5	5.5	5.5	5.5	5.0	6.0	5.0
26	7.0	6.5	7.5	7.0	6.0	5.5	5.5	5.0	5.5	5.0	5.5	5.0
27	7.0	6.5	7.0	7.0	6.0	5.5	5.5	5.0	5.0	5.0	6.0	5.0
28	7.0	6.5	7.0	7.0	5.5	5.5	5.5	5.0	6.0	5.0	6.0	5.0
29	7.0	6.5	7.0	7.0	6.0	5.5	5.5	4.5	6.0	5.0	6.0	5.0
30	7.0	6.5	7.0	7.0	5.5	5.5	5.5	4.5	---	---	6.0	4.5
31	7.5	6.5	---	---	6.0	5.5	5.0	5.0	---	---	6.0	5.0
MONTH	10.0	6.5	8.5	6.5	7.5	5.5	6.0	4.5	6.0	4.5	6.0	4.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.0	5.0	9.5	8.0	10.5	9.0	14.0	9.0	11.5	8.5	---	---
2	6.0	5.0	9.5	8.0	10.0	9.0	14.0	12.0	11.5	9.0	---	---
3	6.0	5.0	9.0	8.0	10.5	9.5	13.5	12.0	10.5	9.0	---	---
4	6.0	5.0	9.5	8.0	11.0	9.5	13.5	12.0	10.5	9.5	---	---
5	6.0	5.0	9.0	8.0	10.5	9.5	14.0	12.0	11.5	9.0	---	---
6	6.0	5.0	9.0	8.0	10.5	9.5	13.5	12.0	10.5	9.5	10.5	9.5
7	6.0	5.0	9.5	8.0	10.5	10.0	14.0	12.5	11.0	9.5	10.5	9.5
8	5.5	5.0	8.5	7.5	11.0	9.5	14.0	10.0	11.0	9.5	10.5	9.5
9	6.0	5.0	8.5	8.0	11.0	9.5	11.0	9.0	11.0	9.5	11.0	10.0
10	6.5	5.0	8.0	7.5	12.0	10.0	11.0	9.0	11.0	9.5	11.0	10.0
11	6.5	5.0	8.5	8.0	11.0	9.5	11.5	8.5	11.0	9.5	11.0	10.0
12	6.5	6.0	9.0	8.0	10.5	10.0	11.5	9.5	11.0	9.5	11.0	9.5
13	6.5	5.5	9.0	8.0	11.0	10.5	11.5	9.0	10.5	9.5	---	---
14	6.0	5.5	9.5	8.0	10.5	9.5	10.5	9.5	11.0	9.5	---	---
15	7.0	6.0	9.5	7.5	11.0	10.5	11.0	9.5	11.0	10.0	---	---
16	7.0	6.0	9.5	8.0	11.5	10.0	11.0	8.5	11.0	10.0	---	---
17	7.0	6.0	9.5	8.0	11.5	9.5	11.0	8.5	11.0	10.0	---	---
18	7.0	6.0	9.5	8.0	11.5	10.0	11.0	9.5	10.5	10.0	---	---
19	7.0	6.0	9.5	8.5	13.5	10.5	11.0	9.5	10.5	10.0	10.0	9.5
20	6.5	6.0	9.5	8.0	14.0	11.5	10.5	9.5	11.0	10.0	10.0	9.5
21	7.0	6.0	9.5	8.5	14.0	12.0	11.0	9.5	11.0	10.0	10.5	9.5
22	7.0	6.5	9.0	8.5	14.0	12.0	11.0	9.5	11.0	10.0	11.0	9.5
23	7.5	6.5	9.0	8.5	13.5	11.5	10.5	9.0	---	---	10.5	8.0
24	8.0	6.5	9.5	8.5	12.5	9.0	10.0	8.5	---	---	10.0	9.0
25	8.5	8.0	9.0	8.5	10.0	9.0	10.5	9.0	---	---	10.5	9.5
26	8.5	7.5	9.0	8.5	10.5	9.5	10.5	9.5	---	---	10.5	9.5
27	8.5	8.0	9.5	8.5	11.0	9.5	10.5	9.5	---	---	10.5	9.5
28	9.0	8.0	10.5	9.0	11.0	9.5	11.0	9.0	---	---	10.5	9.5
29	9.0	8.0	10.0	9.0	11.0	9.0	11.0	9.5	---	---	10.5	9.5
30	9.5	8.0	10.5	9.0	10.5	9.0	11.0	9.5	---	---	10.0	8.0
31	---	---	10.5	9.0	---	---	11.0	8.5	---	---	---	---
MONTH	9.5	5.0	10.5	7.5	14.0	9.0	14.0	8.5	11.5	8.5	11.0	8.0

14335075 ROGUE RIVER AT MCLEOD, OR--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	9.7	8.9	9.2	12.1	10.1	11.3	11.3	10.8	11.0	11.7	11.2	11.4
2	10.4	9.0	9.6	10.5	10.0	10.1	11.0	10.8	10.9	11.6	11.1	11.4
3	11.6	10.3	10.5	10.7	10.0	10.2	12.2	10.9	11.6	11.5	9.9	11.0
4	11.2	10.3	10.6	10.6	10.1	10.2	12.3	12.2	12.2	10.5	10.0	10.2
5	10.7	10.1	10.4	10.7	10.0	10.2	12.5	12.0	12.3	10.5	10.0	10.2
6	11.0	10.5	10.7	11.6	10.0	10.3	12.2	11.8	12.0	10.6	10.1	10.3
7	11.7	10.5	10.8	10.4	10.0	10.2	12.3	11.8	12.0	10.6	10.1	10.4
8	11.8	10.6	11.1	10.7	10.1	10.3	12.3	11.1	11.5	10.8	10.3	10.5
9	11.7	10.9	11.2	11.1	10.2	10.4	11.5	11.2	11.3	10.7	10.3	10.5
10	12.1	11.0	11.4	10.8	10.3	10.5	11.6	11.1	11.3	11.1	10.5	10.7
11	12.0	11.2	11.5	10.8	10.3	10.4	11.3	11.1	11.2	10.9	10.4	10.6
12	12.9	11.3	11.6	10.7	10.2	10.4	11.5	11.2	11.3	12.3	10.6	11.4
13	12.3	11.3	11.6	10.7	10.2	10.4	11.5	11.2	11.3	11.1	10.8	10.9
14	12.2	11.3	11.6	10.8	10.2	10.4	11.5	11.2	11.3	11.3	10.8	11.0
15	11.7	10.9	11.2	10.9	10.2	10.5	11.5	11.1	11.2	12.7	11.3	12.4
16	12.0	9.9	11.0	10.4	10.0	10.2	12.0	11.0	11.2	13.6	11.8	13.1
17	10.8	10.0	10.2	10.9	10.2	10.3	11.3	10.9	11.1	11.9	11.3	11.5
18	10.4	9.8	10.1	10.9	10.2	10.4	11.3	11.0	11.1	11.6	11.2	11.4
19	11.2	9.8	10.1	10.8	10.3	10.5	11.3	11.0	11.1	11.6	11.4	11.5
20	10.4	9.8	10.0	10.8	10.2	10.5	11.3	10.9	11.1	12.3	11.6	11.8
21	10.6	9.8	10.1	10.8	10.2	10.4	11.3	11.0	11.2	12.9	12.0	12.4
22	11.5	9.8	10.3	10.4	10.1	10.2	11.5	11.0	11.3	12.9	12.8	12.9
23	10.6	9.9	10.1	10.5	10.0	10.2	11.3	11.0	11.1	12.9	12.8	12.9
24	10.3	9.8	10.0	10.4	10.0	10.2	11.4	11.0	11.2	12.9	12.8	12.9
25	10.4	9.8	10.1	10.2	10.0	10.1	11.5	11.2	11.4	12.9	12.7	12.8
26	10.6	9.9	10.2	10.4	10.0	10.2	11.7	11.4	11.5	12.7	11.9	12.1
27	10.5	9.9	10.0	10.6	10.2	10.4	11.7	11.3	11.5	12.0	11.9	11.9
28	10.5	9.9	10.1	10.6	10.3	10.4	11.7	11.3	11.4	11.9	11.8	11.8
29	10.6	9.8	10.1	10.6	10.4	10.5	11.7	11.3	11.5	12.0	11.9	12.0
30	11.6	9.8	10.6	11.2	10.3	10.6	11.7	11.2	11.4	12.1	12.0	12.0
31	12.1	11.1	11.5	---	---	---	11.7	11.2	11.4	12.1	12.0	12.1
MONTH	12.9	8.9	10.6	12.1	10.0	10.4	12.5	10.8	11.4	13.6	9.9	11.6

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	12.1	12.0	12.0	12.3	11.6	11.9	11.9	11.2	11.5	11.7	11.2	11.5
2	12.8	12.0	12.1	12.6	11.6	12.0	11.9	10.8	11.3	11.7	11.2	11.5
3	12.2	12.1	12.1	12.8	11.7	12.0	11.6	10.9	11.2	11.7	11.2	11.5
4	12.8	12.1	12.2	12.7	11.7	12.2	11.4	10.9	11.1	11.6	11.2	11.4
5	12.3	12.0	12.2	12.6	11.8	12.1	11.6	10.8	11.2	11.7	11.2	11.5
6	12.7	12.1	12.4	12.6	11.9	12.2	11.7	11.1	11.4	11.8	11.3	11.5
7	12.9	11.3	12.6	12.6	11.0	11.9	11.9	11.1	11.4	11.8	11.2	11.5
8	12.7	11.3	12.0	11.8	10.9	11.4	11.8	11.0	11.3	11.7	11.3	11.5
9	12.8	12.2	12.6	11.7	10.9	11.3	11.8	11.1	11.4	11.5	11.2	11.4
10	12.8	12.4	12.6	11.7	10.9	11.2	11.7	11.2	11.4	11.7	11.3	11.4
11	12.8	11.2	12.3	11.6	11.0	11.2	11.7	11.0	11.3	11.7	11.2	11.4
12	12.8	11.5	12.5	11.8	11.1	11.3	11.4	10.9	11.2	11.7	11.2	11.4
13	12.6	12.1	12.4	11.8	11.0	11.3	11.5	10.9	11.2	11.8	11.3	11.5
14	12.7	11.1	12.1	11.9	11.1	11.4	11.5	11.0	11.2	11.8	11.2	11.5
15	11.5	11.2	11.3	12.0	11.3	11.5	11.5	11.0	11.3	11.8	11.2	11.5
16	11.4	11.2	11.3	12.2	11.5	11.6	11.5	11.0	11.2	11.7	11.3	11.5
17	11.4	11.1	11.2	11.8	11.4	11.6	12.0	11.0	11.8	11.8	11.3	11.6
18	11.4	11.1	11.2	12.1	11.5	11.7	12.0	11.6	11.8	11.8	11.3	11.5
19	11.4	11.1	11.2	12.1	11.5	11.8	11.9	11.5	11.7	11.8	11.3	11.5
20	12.7	11.2	11.7	12.1	11.6	11.8	11.8	11.5	11.6	11.8	11.2	11.5
21	13.0	11.3	12.5	12.0	11.4	11.7	12.8	11.6	12.1	11.7	11.2	11.4
22	12.2	11.1	11.5	12.0	11.4	11.7	12.8	12.5	12.7	11.7	11.3	11.5
23	11.1	10.6	10.8	12.0	11.4	11.7	12.6	12.2	12.5	11.8	11.3	11.5
24	11.4	10.8	11.0	12.1	11.3	11.7	12.5	12.0	12.3	11.8	11.4	11.5
25	11.6	11.0	11.2	12.1	11.4	11.6	12.2	11.4	11.8	11.8	11.4	11.5
26	11.7	11.1	11.4	12.0	11.4	11.6	11.7	11.2	11.5	11.7	11.2	11.5
27	12.2	11.3	11.5	12.1	11.5	11.8	11.6	11.2	11.4	11.6	11.1	11.4
28	12.5	11.4	11.9	12.2	11.5	11.8	11.6	11.2	11.4	11.5	11.0	11.2
29	12.5	11.5	11.9	12.2	11.4	11.7	11.7	11.1	11.4	11.6	11.0	11.3
30	---	---	---	12.1	11.4	11.8	11.7	11.1	11.4	11.5	10.9	11.2
31	---	---	---	12.0	11.3	11.6	---	---	---	11.4	10.8	11.1
MONTH	13.0	10.6	11.9	12.8	10.9	11.7	12.8	10.8	11.5	11.8	10.8	11.4

14335075 ROGUE RIVER AT MCLEOD, OR--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	11.4	10.8	11.0	10.8	9.9	10.4	10.9	10.1	10.6	---	---	---
2	11.4	10.7	11.0	10.5	9.9	10.3	10.8	10.1	10.5	---	---	---
3	11.3	10.7	11.0	10.5	10.0	10.2	10.7	10.2	10.5	---	---	---
4	11.2	10.6	10.9	10.4	9.8	10.1	10.7	10.2	10.4	---	---	---
5	11.2	10.7	10.9	10.5	9.7	10.1	10.9	10.0	10.5	---	---	---
6	11.0	10.5	10.8	10.5	9.8	10.1	10.8	10.3	10.5	10.5	9.8	10.1
7	11.1	10.5	10.8	10.2	9.7	10.0	10.7	10.2	10.4	10.4	9.8	10.0
8	11.0	10.3	10.7	11.0	9.8	10.4	10.7	10.2	10.4	10.5	9.7	10.0
9	11.0	10.2	10.7	11.3	10.5	10.8	10.7	10.2	10.4	10.3	9.6	9.9
10	10.8	10.1	10.5	11.2	10.4	10.7	10.6	10.1	10.4	10.4	9.6	9.9
11	10.8	10.3	10.6	11.0	10.3	10.7	10.6	10.1	10.4	10.4	9.5	9.9
12	11.0	10.4	10.7	11.1	10.3	10.6	10.6	10.1	10.4	10.2	9.4	9.7
13	10.8	10.4	10.6	11.1	10.3	10.6	10.7	10.2	10.4	---	---	---
14	10.9	10.5	10.7	10.9	10.4	10.6	10.6	10.2	10.4	---	---	---
15	10.8	10.2	10.6	10.9	10.4	10.6	10.6	10.1	10.3	---	---	---
16	10.8	10.3	10.5	10.8	10.4	10.6	10.6	10.1	10.3	---	---	---
17	10.8	10.0	10.4	11.0	10.3	10.6	10.6	10.0	10.3	---	---	---
18	10.7	10.0	10.4	11.0	10.4	10.6	10.6	10.1	10.3	---	---	---
19	10.5	9.8	10.2	10.9	10.3	10.6	10.6	10.1	10.3	9.4	8.6	8.9
20	10.3	9.8	10.1	10.8	10.4	10.6	10.6	10.1	10.3	9.5	8.6	9.0
21	10.5	9.8	10.1	10.7	10.3	10.5	10.6	9.9	10.3	9.5	8.8	9.1
22	10.6	9.9	10.1	10.7	10.3	10.5	10.6	9.9	10.2	9.7	8.8	9.2
23	10.4	9.8	10.2	10.9	10.3	10.6	---	---	---	9.8	9.0	9.4
24	11.1	10.0	10.5	10.8	10.4	10.6	---	---	---	9.9	9.1	9.5
25	11.1	10.5	10.8	10.8	10.3	10.6	---	---	---	10.0	9.2	9.5
26	11.0	10.6	10.8	10.8	10.3	10.6	---	---	---	10.0	9.4	9.6
27	11.0	10.5	10.8	10.7	10.3	10.5	---	---	---	10.0	9.4	9.7
28	11.1	10.5	10.8	10.7	10.2	10.5	---	---	---	10.2	9.4	9.8
29	11.0	10.5	10.8	10.7	10.2	10.5	---	---	---	10.5	9.5	9.9
30	11.1	10.5	10.8	10.7	10.2	10.4	---	---	---	10.5	9.7	10.0
31	---	---	---	10.8	10.1	10.6	---	---	---	---	---	---
MONTH	11.4	9.8	10.6	11.3	9.7	10.5	10.9	9.9	10.4	10.5	8.6	9.6

14335075 ROGUE RIVER AT MCLEOD, OR--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	1170	---	9.5	1000	6	16	1970	4	21
2	1060	---	8.6	979	6	16	2120	3	17
3	990	---	8.0	958	15	39	3040	5	41
4	992	---	8.0	964	2	5.2	4020	5	54
5	995	7	19	1400	1	3.8	3780	4	41
6	995	4	11	2030	1	5.5	2830	7	53
7	995	3	8.1	1540	2	8.3	2700	3	22
8	992	4	11	1090	3	8.8	2240	4	24
9	990	2	5.3	993	5	13	1870	4	20
10	992	2	5.4	1020	5	14	1870	3	15
11	990	2	5.3	995	7	19	1860	4	20
12	996	1	2.7	993	3	8.0	1770	4	19
13	986	2	5.3	993	7	19	1720	6	28
14	987	4	11	988	4	11	1590	3	13
15	992	32	86	989	4	11	1400	5	19
16	989	19	51	990	4	11	1410	5	19
17	989	18	48	1000	2	5.4	1390	4	15
18	989	6	16	1000	2	5.4	1360	4	15
19	1010	12	33	1080	2	5.8	1360	4	15
20	995	9	24	1170	2	6.3	1330	1	3.6
21	998	15	40	1160	3	9.4	1430	2	7.7
22	1000	5	13	1210	2	6.5	1440	2	7.8
23	990	5	13	1240	5	17	1430	3	12
24	990	4	11	1280	3	10	1430	2	7.7
25	1010	5	14	1710	4	18	1430	7	27
26	999	8	22	2520	7	48	1300	2	7.0
27	985	8	21	2510	1	6.8	1200	3	9.7
28	990	6	16	2500	1	6.8	1200	3	9.7
29	986	20	53	2510	1	6.8	1200	2	6.5
30	995	8	21	2010	4	22	1230	3	10
31	1010	12	33	---	---	---	1410	4	15
TOTAL	31047	---	633.2	40822	---	382.8	56330	---	594.7

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	1110	4	12	769	---	12	734	4	7.9
2	1040	2	5.6	745	---	12	730	4	7.9
3	1040	2	5.6	768	---	12	752	4	8.1
4	1040	1	2.8	762	---	12	752	4	8.1
5	1040	2	5.6	747	---	12	928	5	13
6	1040	3	8.4	750	6	12	1170	4	13
7	1050	2	5.7	742	6	12	1170	3	9.5
8	1040	2	5.6	739	5	10	1170	3	9.5
9	1050	2	5.7	740	4	8.0	1160	4	13
10	1350	1	3.6	733	5	9.9	1160	5	16
11	1990	3	16	733	6	12	1170	2	6.3
12	2260	6	37	732	6	12	1170	3	9.5
13	875	6	14	733	5	9.9	1200	3	9.7
14	1020	5	14	727	6	12	1390	4	15
15	7260	24	498	736	7	14	1940	4	21
16	9240	8	200	735	6	12	1980	5	27
17	9060	14	342	749	4	8.1	1870	5	25
18	7960	14	301	765	10	21	1770	5	24
19	5240	9	127	768	5	10	1730	3	14
20	3870	10	104	750	7	14	1690	4	18
21	3140	11	93	728	6	12	1700	4	18
22	2710	---	73	747	5	10	1540	4	17
23	2650	---	72	750	3	6.1	1670	5	23
24	2710	---	73	752	3	6.1	1410	4	15
25	2700	---	73	746	4	8.1	1170	4	13
26	2100	---	45	742	3	6.0	1190	3	9.6
27	1930	---	42	731	3	5.9	1180	3	9.6
28	1330	---	29	768	3	6.2	1180	4	13
29	1010	---	22	731	4	7.9	1170	6	19
30	1000	---	22	---	---	---	1170	5	16
31	993	---	16	---	---	---	1180	2	6.4
TOTAL	81848	---	2273.6	21618	---	305.2	40196	---	435.1

14335075 ROGUE RIVER AT MCLEOD, OR--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	1180	3	9.6						
2	1160	3	9.4						
3	1070	2	5.8						
4	1020	3	8.3						
5	975	5	13						
6	986	4	11						
7	985	6	16						
8	992	6	16						
9	1090	5	15						
10	1480	4	16						
11	1620	5	22						
12	1480	3	12						
13	1480	4	16						
14	1590	4	17						
15	1670	5	23						
16	1680	4	18						
17	1850	3	15						
18	2170	4	23						
19	2270	1	6.1						
20	2280	6	37						
21	2870	2	15						
22	3230	3	26						
23	2650	2	14						
24	2420	1	6.5						
25	2380	1	6.4						
26	2410	3	20						
27	2410	4	26						
28	2390	3	19						
29	2380	5	32						
30	2380	5	32						
31	---	---	---						
TOTAL	54548	---	506.1						

14335500 SOUTH FORK BIG BUTTE CREEK NEAR BUTTE FALLS, OR

LOCATION.--Lat 42°32'25", long 122°33'15", in NE¼SW¼ sec.11, T.35 S.,R.2 E., Jackson County, Hydrologic Unit 17100307, on right bank 10 ft (3 m) downstream from Ginger Creek, 0.6 mi (1.0 km) east of town of Butte Falls, and at mile 14.0 (22.5 km).

DRAINAGE AREA.--138 mi^2 (357 km^2).

PERIOD OF RECORD.--September 1910 to October 1911 (published as "at Butte Falls"), August to October 1915, October 1917 to September 1922, March 1925 to current year. Monthly discharge only August, September 1915, published in WSP 1318.

REVISED RECORDS.--WSP 1288: 1911, 1918-19, 1921-22, 1929. WSP 1318: 1918-19. WSP 1738: Drainage area.

GAGE.--Water-stage recorder. Concrete control since Oct. 1, 1968. Altitude of gage is 2,360 ft (719 m), from river-profile map. Sept. 21, 1910, to Sept. 30, 1922, nonrecording gage at site 300 ft (91 m) upstream at different datums.

REMARKS.--Records good. Flow slightly regulated since 1952 by Willow Creek Reservoir, capacity, 7,320 acre-ft (9.03 hm^3). Diversions for irrigation above station and for municipal water supply for Medford (since 1927) and Butte Falls.

AVERAGE DISCHARGE.--61 years (water years 1911, 1918-22, 1926-80), 156 ft^3/s (4.418 m^3/s), 113,000 acre-ft/yr (139 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,600 ft^3/s (357 m^3/s) Dec. 22, 1964, gage height, 7.65 ft (2.332 m), from rating curve extended above 1,600 ft^3/s (45.3 m^3/s) on basis of slope-area measurement of peak flow; minimum, 33 ft^3/s (0.93 m^3/s) Oct. 2, 1968, Oct. 9, 10, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 450 ft^3/s (12.7 m^3/s) and maximum discharge, 558 ft^3/s (15.8 m^3/s) Jan. 13, gage height, 2.40 ft (0.732 m); minimum, 33 ft^3/s (0.93 m^3/s) Oct. 9, 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	55	66	57	94	107	140	125	75	61	62	61
2	39	50	127	55	94	105	135	120	79	59	64	62
3	37	49	150	55	127	130	130	115	83	70	62	62
4	39	55	127	57	115	150	125	107	83	72	62	59
5	37	59	122	61	112	145	127	98	87	73	62	59
6	37	52	105	61	112	145	147	98	85	72	64	59
7	39	49	96	59	105	137	142	94	87	72	64	57
8	39	46	87	57	103	130	147	90	79	70	64	57
9	36	44	81	61	98	125	185	110	77	72	64	57
10	36	44	81	66	94	120	197	140	75	72	66	59
11	37	43	73	64	92	125	191	132	73	72	66	57
12	37	43	72	218	90	120	182	125	103	70	64	59
13	39	41	68	385	87	137	179	120	103	70	64	59
14	43	41	66	390	85	250	173	117	98	68	62	61
15	47	41	62	293	83	257	167	115	94	68	62	59
16	41	52	62	274	83	218	161	110	90	68	62	59
17	40	87	62	309	85	212	158	103	87	68	64	59
18	43	87	61	253	90	212	152	96	83	68	66	66
19	62	73	59	212	96	191	150	90	81	66	64	62
20	68	64	57	185	115	194	188	87	77	64	64	62
21	62	61	72	164	110	188	200	85	75	64	64	62
22	47	72	66	150	117	173	182	83	72	64	62	61
23	44	90	62	137	112	167	176	90	73	62	62	61
24	46	164	61	130	107	158	170	94	72	61	61	61
25	73	125	61	122	107	155	161	96	72	62	61	61
26	54	103	57	115	105	158	155	94	70	62	61	61
27	52	85	57	110	105	152	147	85	68	61	62	61
28	57	77	55	98	120	142	145	83	66	62	62	61
29	52	73	55	87	110	137	137	79	66	62	62	59
30	57	70	57	90	---	132	130	77	64	64	62	57
31	57	---	57	94	---	137	---	75	---	62	61	---
TOTAL	1437	1995	2344	4469	2953	4909	4779	3133	2397	2061	1952	1800
MEAN	46.4	66.5	75.6	144	102	158	159	101	79.9	66.5	63.0	60.0
MAX	73	164	150	390	127	257	200	140	103	73	66	66
MIN	36	41	55	55	83	105	125	75	64	59	61	57
AC-FT	2850	3960	4650	8860	5860	9740	9480	6210	4750	4090	3870	3570

CAL YR 1979 TOTAL 35307 MEAN 96.7 MAX 385 MIN 36 AC-FT 70030
WTR YR 1980 TOTAL 34229 MEAN 93.5 MAX 390 MIN 36 AC-FT 67890

14337500 BIG BUTTE CREEK NEAR MCLEOD, OR

LOCATION.--Lat 42°39'05", long 122°41'25", in NE¼NW¼ sec.3, T.34 S., R.1 E., Jackson County, Hydrologic Unit 17100307, on right bank 225 ft (69 m) upstream from county road bridge, 0.9 mi (1.4 km) south of McLeod, and at mile 0.64 (1.03 km).

DRAINAGE AREA.--245 mi² (635 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1945 to September 1957. October 1967 to current year.

REVISED RECORDS.--WSP 1738: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,525.95 ft (465.110 m) National Geodetic Vertical Datum of 1929. Oct. 9, 1945, to Sept. 30, 1957, nonrecording gage at site 260 ft (79 m) downstream at datum 0.53 ft (0.162 m) higher.

REMARKS.--Water-discharge records good except those for December and January, which are fair. Slight regulation by fish hatchery 600 ft (183 m) above station. Several diversions in the vicinity of Butte Falls, the two largest being the city of Medford diversion and Eagle Point Irrigation District Canal.

AVERAGE DISCHARGE.--25 years, 287 ft³/s (8.128 m³/s), 207,900 acre-ft/yr (256 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,950 ft³/s (253 m³/s) Dec. 22, 1955, gage height, 12.75 ft (3.886 m), site and datum then in use, from rating curve extended above 3,300 ft³/s (93.5 m³/s) on basis of slope-area measurement of peak flow; minimum, 6.4 ft³/s (0.18 m³/s) June 23, 24, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 22, 1964, reached a stage of 18.6 ft (5.67 m), present site, from floodmark by local resident, discharge, 16,800 ft³/s (476 m³/s), from rating curve, at former site, extended above 9,000 ft³/s (255 m³/s) and field estimate of overflow.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,800 ft³/s (51.0 m³/s) and maximum discharge, 2,860 ft³/s (81.0 m³/s) Jan. 13, gage height, 7.87 ft (2.399 m); minimum, 39 ft³/s (1.10 m³/s) Sept. 9, 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	101	136	161	163	204	303	185	99	70	62	43
2	118	94	548	141	168	196	253	174	101	73	62	43
3	120	122	557	129	342	279	204	168	118	99	61	44
4	118	131	416	138	231	313	201	158	109	105	67	43
5	116	103	357	143	216	276	204	146	116	97	58	42
6	116	95	256	138	225	269	289	148	114	97	62	43
7	116	103	213	127	196	243	266	136	114	94	64	44
8	118	99	199	120	187	225	299	129	103	81	65	44
9	120	87	176	122	174	210	420	161	95	78	67	43
10	118	87	151	163	168	196	396	234	92	81	67	40
11	120	85	143	158	163	204	357	225	88	78	67	40
12	122	87	122	1170	158	199	324	199	116	75	64	40
13	125	87	122	1790	151	296	306	182	131	90	64	40
14	138	85	118	1550	151	784	296	174	122	72	61	42
15	134	83	111	959	148	650	279	168	114	67	58	42
16	76	97	109	954	143	493	262	161	107	62	65	42
17	76	231	111	916	141	484	259	153	103	64	50	40
18	83	262	114	660	179	529	237	153	99	62	51	46
19	111	190	114	515	219	458	228	134	94	61	54	47
20	138	141	109	420	250	467	412	120	88	59	62	47
21	120	120	185	350	222	449	424	116	85	57	50	48
22	92	272	168	317	240	548	317	114	83	64	47	47
23	90	357	146	306	225	376	289	127	83	57	42	47
24	90	876	148	250	204	353	272	134	83	57	42	47
25	213	428	143	228	199	342	256	138	83	55	42	47
26	111	310	129	216	196	350	243	136	81	54	42	47
27	95	225	120	207	207	342	228	120	72	54	48	47
28	105	185	116	182	289	310	222	114	65	57	58	48
29	94	161	116	161	219	296	207	109	64	48	48	48
30	116	146	127	156	---	286	201	105	65	54	42	50
31	111	---	201	163	---	296	---	101	---	64	42	---
TOTAL	3540	5450	5781	13010	5774	10923	8454	4622	2887	2186	1734	1331
MEAN	114	182	186	420	199	352	282	149	96.2	70.5	55.9	44.4
MAX	213	876	557	1790	342	784	424	234	131	105	67	50
MIN	76	83	109	120	141	196	201	101	64	48	42	40
AC-FT	7020	10810	11470	25810	11450	21670	16770	9170	5730	4340	3440	2640

CAL YR 1979 TOTAL 62661 MEAN 172 MAX 1210 MIN 48 AC-FT 124300
WTR YR 1980 TOTAL 65692 MEAN 179 MAX 1790 MIN 40 AC-FT 130300

14337500 BIG BUTTE CREEK NEAR MCLEOD, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: August 1970 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 24.0°C June 27, July 15-17, 1973, Aug. 2, 1977, July 17, 20, 1979, July 21, 1980; minimum, 0.0°C Feb. 28 to Mar. 2, 1971, Feb. 2, 1972, Jan. 8, 9, 1977, Dec. 29, 1978, to Jan. 1, 1979, Jan. 27, 28, 1980.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 24.0°C July 21; minimum, 0.0°C Jan. 27, 28.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	14.5	10.5	9.5	7.5	6.0	4.0	7.5	6.5	6.0	5.0	---	---
2	14.5	10.5	9.0	8.0	7.5	6.0	6.5	4.5	7.0	4.5	---	---
3	15.0	10.5	9.5	8.0	7.5	6.0	7.0	5.5	6.5	3.0	---	---
4	14.0	11.0	9.5	8.5	6.5	5.5	7.0	6.0	---	---	---	---
5	14.5	10.5	10.5	8.5	6.0	5.0	7.5	6.5	---	---	---	---
6	13.5	12.0	9.5	8.0	6.0	5.0	7.0	6.5	---	---	---	---
7	14.5	10.5	9.5	7.0	6.0	5.0	6.5	5.5	---	---	---	---
8	14.0	10.5	8.0	5.5	6.0	5.0	6.5	5.0	---	---	---	---
9	13.5	9.5	7.5	5.0	6.5	4.5	6.5	5.5	---	---	---	---
10	13.5	9.5	7.0	5.0	6.5	4.5	5.5	3.0	---	---	---	---
11	13.5	9.5	6.5	4.0	4.5	2.5	5.0	3.0	---	---	---	---
12	13.0	9.5	6.0	4.0	4.5	2.5	7.0	5.0	---	---	---	---
13	13.0	10.5	6.5	3.5	4.0	2.5	7.5	7.0	---	---	---	---
14	11.5	11.0	6.0	4.0	3.5	2.5	7.5	7.0	---	---	---	---
15	13.5	10.5	7.0	4.0	3.0	2.0	7.0	5.5	---	---	---	---
16	13.0	10.0	8.0	7.0	3.5	2.0	7.0	6.0	---	---	---	---
17	13.0	10.5	9.0	7.5	5.5	3.5	7.0	5.5	---	---	---	---
18	11.5	10.0	7.5	6.5	6.5	5.0	5.5	3.0	---	---	---	---
19	10.5	9.5	7.0	5.5	7.5	6.5	4.0	2.5	---	---	---	---
20	9.5	8.5	5.5	4.0	7.0	6.0	4.5	3.0	---	---	---	---
21	10.0	8.0	5.0	3.0	7.0	6.0	4.5	3.0	---	---	6.0	---
22	9.5	9.0	6.0	5.0	6.0	4.5	5.0	3.5	---	---	8.0	4.5
23	11.0	9.5	5.5	4.5	5.0	4.0	5.0	3.5	---	---	8.0	5.5
24	11.0	10.0	7.0	5.5	5.0	4.5	5.0	2.5	---	---	8.0	5.0
25	12.0	10.0	6.0	4.5	5.5	4.5	4.0	3.0	---	---	8.0	6.0
26	11.5	9.0	5.5	4.0	5.5	4.0	4.5	1.0	---	---	7.5	6.5
27	10.5	9.5	4.5	3.0	4.0	2.5	2.5	.0	---	---	8.5	6.0
28	10.5	8.5	5.0	3.0	4.0	2.0	2.0	.0	---	---	8.5	5.0
29	9.0	7.0	5.5	3.5	5.5	4.0	2.5	.5	---	---	9.0	6.0
30	9.5	7.5	6.0	4.5	7.0	5.0	4.5	2.5	---	---	9.0	6.0
31	10.5	9.0	---	---	7.0	5.5	5.5	4.5	---	---	6.5	5.5
MONTH	15.0	7.0	10.5	3.0	7.5	2.0	7.5	.0	7.0	3.0	9.0	4.5

14337500 BIG BUTTE CREEK NEAR MCLEOD, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.5	5.0	14.5	9.0	15.5	13.0	---	---	22.0	16.0	18.5	12.5
2	8.5	4.5	15.5	10.5	13.0	10.5	---	15.5	21.5	---	---	---
3	8.0	5.5	16.5	10.5	---	10.0	18.0	14.5	21.0	---	---	---
4	7.5	6.0	17.5	11.5	---	10.5	17.0	14.5	---	14.5	18.5	---
5	---	6.5	16.5	13.0	---	11.0	17.5	13.5	20.0	14.0	19.0	13.5
6	---	---	14.0	11.5	14.5	---	20.0	13.5	20.0	---	19.0	13.5
7	---	---	15.5	8.5	17.5	12.0	21.0	---	20.5	---	19.0	14.0
8	---	---	12.5	10.5	18.5	12.5	19.5	---	---	---	18.0	12.5
9	---	---	11.0	9.5	19.5	14.0	20.0	---	21.0	---	18.0	---
10	---	---	9.5	8.0	19.0	13.0	---	---	21.5	---	---	---
11	---	---	10.5	8.5	15.5	---	---	---	22.0	---	18.0	---
12	---	---	13.0	9.5	15.0	12.0	20.5	14.5	---	---	16.0	13.0
13	---	---	12.0	9.5	---	---	---	---	20.5	14.5	---	---
14	---	---	13.0	10.0	14.0	11.0	19.5	---	20.0	15.0	14.0	9.5
15	---	---	14.0	8.5	18.5	10.5	21.5	---	20.0	13.5	15.0	9.0
16	---	---	15.5	9.0	---	---	22.0	---	19.5	---	---	---
17	13.0	9.0	16.5	9.5	---	---	22.0	---	19.5	---	16.0	---
18	13.0	8.5	16.5	11.0	20.0	13.0	21.5	---	---	---	---	---
19	13.5	10.0	18.5	11.5	---	---	---	---	19.5	13.0	---	---
20	12.0	8.0	19.0	12.0	---	---	23.0	---	---	13.0	14.0	12.5
21	9.0	7.0	17.0	13.0	20.5	---	24.0	17.0	19.5	---	14.5	9.5
22	9.0	8.0	14.5	---	---	---	23.0	---	19.0	12.5	14.5	9.5
23	12.0	8.5	---	---	---	13.0	23.0	16.5	---	---	15.0	10.0
24	13.0	10.0	12.0	8.5	---	12.5	22.5	---	19.5	13.5	15.5	11.0
25	13.5	9.0	12.5	9.5	17.0	12.0	22.5	---	---	---	15.5	11.0
26	14.5	10.0	13.5	9.5	---	12.5	---	---	18.0	13.0	16.0	---
27	16.0	10.5	15.0	10.0	19.0	11.0	23.5	---	19.0	14.0	15.0	---
28	15.0	12.0	16.5	11.0	---	---	23.5	---	18.0	12.5	15.0	---
29	14.5	10.0	17.5	11.0	---	---	23.5	---	---	12.0	---	---
30	14.0	8.5	---	---	20.5	---	23.0	16.5	---	10.5	14.5	10.0
31	---	---	---	---	---	---	22.5	16.5	---	---	---	---
MONTH	16.0	4.5	19.0	8.0	20.5	10.0	24.0	13.5	22.0	10.5	19.0	9.0

14337600 ROGUE RIVER NEAR MCLEOD, OR

LOCATION.--Lat 42°39'20", long 122°42'50", in SW¼ sec.33, T.33 S., R.1 E., Jackson County, Hydrologic Unit 17100307, on left bank at Obstinate J Ranch, 1.3 mi (2.1 km) downstream from Big Butte Creek, 1.6 mi (2.6 km) southwest of McLeod, and at mile 154.0 (247.8 km).

DRAINAGE AREA.--938 mi^2 (2,429 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,489.08 ft (453.872 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good. Flow regulated since February 1977 by Lost Creek Lake (see station 14335040). Diversions for irrigation above station; most of low flow of Big Butte Creek is diverted near Butte Falls.

AVERAGE DISCHARGE.--15 years, 2,099 ft^3/s (59.44 m^3/s), 1,521,000 acre-ft/yr (1.88 km^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,000 ft^3/s (850 m^3/s) Mar. 3, 1972, gage height, 12.24 ft (3.731 m); minimum, 468 ft^3/s (13.3 m^3/s) Feb. 18, 1977, result of closure of Lost Creek Dam, minimum prior to that time, 604 ft^3/s (17.1 m^3/s) Sept. 5, 1968.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1928, 20.35 ft (6.203 m) Dec. 22, 1964, from floodmarks, discharge, 74,300 ft^3/s (2,100 m^3/s) from slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,500 ft^3/s (297 m^3/s) Jan. 15, gage height, 6.83 ft (2.082 m); minimum, 761 ft^3/s (21.6 m^3/s) Oct. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1290	1100	2110	1270	932	938	1490	2540	1570	1920	2220	1570
2	1180	1070	2670	1180	914	926	1420	2530	1570	1910	2220	1570
3	1110	1080	3600	1160	1110	1030	1280	2530	1580	1930	2220	1580
4	1110	1100	4440	1180	994	1060	1220	2520	1590	1960	2220	1560
5	1110	1510	4140	1190	963	1200	1180	2500	1570	1950	2210	1560
6	1110	2120	3090	1180	975	1440	1280	2490	1580	1950	2210	1560
7	1110	1640	2910	1170	938	1420	1250	2490	1580	1950	2220	1570
8	1110	1190	2430	1160	926	1390	1290	2480	1560	1950	2220	1320
9	1110	1080	2050	1170	914	1370	1510	2300	1560	1930	2220	1200
10	1110	1100	2020	1520	902	1360	1880	2220	1560	1930	2210	1200
11	1110	1080	2000	2150	896	1370	1970	2200	1840	1940	2210	1200
12	1120	1080	1900	3430	890	1370	1800	2160	1890	1940	2220	1200
13	1110	1080	1840	2670	884	1500	1780	1840	1900	1950	2220	1200
14	1130	1070	1710	2570	878	2170	1890	1440	1880	1930	2210	1200
15	1130	1070	1520	8220	884	2590	1950	1330	1870	1970	2220	1200
16	1060	1090	1520	10200	878	2480	1940	1690	1870	2020	2220	1200
17	1060	1240	1500	9980	890	2350	2110	1820	1920	2020	2220	1200
18	1070	1270	1480	8620	944	2300	2410	1830	1960	2170	2220	1200
19	1120	1270	1470	5750	987	2190	2500	1800	1960	2170	2210	1210
20	1130	1310	1440	4290	1000	2160	2690	1790	1950	2160	2100	1210
21	1120	1280	1610	3490	950	2150	3290	1880	1950	2160	1830	1200
22	1100	1480	1610	3030	987	2080	3550	2020	1940	2170	1580	1200
23	1080	1590	1570	2960	975	2050	2940	2110	1940	2160	1510	1200
24	1080	2160	1570	2960	956	1760	2690	2190	1950	2190	1500	1200
25	1230	2130	1570	2930	944	1520	2640	2300	1950	2210	1500	1200
26	1110	2830	1420	2310	938	1530	2650	2290	1940	2210	1570	1200
27	1080	2730	1320	2130	938	1530	2640	1990	1940	2210	1570	1200
28	1100	2680	1320	1520	1060	1490	2610	1680	1920	2200	1580	1200
29	1080	2670	1320	1170	950	1470	2590	1560	1920	2210	1580	1200
30	1110	2160	1360	1160	---	1460	2590	1570	1920	2200	1570	1200
31	1130	---	1610	1160	---	1480	---	1560	---	2210	1570	---
TOTAL	34610	46260	62120	94880	27397	51134	63030	63650	54130	63780	61580	38710
MEAN	1116	1542	2004	3061	945	1649	2101	2053	1804	2057	1986	1290
MAX	1290	2830	4440	10200	1110	2590	3550	2540	1960	2210	2220	1580
MIN	1060	1070	1320	1160	878	926	1180	1330	1560	1910	1500	1200
AC-FT	68650	91760	123200	188200	54340	101400	125000	126200	107400	126500	122100	76780

CAL YR 1979 TOTAL 653875 MEAN 1791 MAX 4440 MIN 838 AC-FT 1297000
WTR YR 1980 TOTAL 661281 MEAN 1807 MAX 10200 MIN 878 AC-FT 1312000

14337600 ROGUE RIVER NEAR MCLEOD, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: August 1970 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 18.0°C July 17, 18, Aug. 7, 1973; minimum, 0.5°C Jan. 3-5, 14, 15, 1971.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 15.0°C July 1; minimum, 3.5°C Jan. 28-30.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	10.5	9.0	8.0	7.0	7.0	6.5	6.0	5.5	5.0	4.5	5.5	5.0
2	10.5	8.5	7.5	6.5	7.5	7.0	5.5	5.0	5.0	4.5	6.5	5.0
3	10.5	9.0	7.5	7.0	7.5	6.5	6.0	5.0	5.5	4.5	6.0	5.5
4	10.5	9.0	7.5	7.0	7.0	7.0	5.5	5.0	5.5	4.0	6.5	5.0
5	10.5	9.0	8.0	7.0	7.0	6.5	6.0	5.5	5.0	4.5	6.5	5.5
6	10.0	9.5	8.5	8.0	7.0	6.5	5.5	5.0	5.5	4.5	6.0	5.0
7	11.0	9.0	8.5	6.5	7.0	6.5	5.5	5.0	5.5	4.5	6.0	4.5
8	10.0	8.5	8.0	6.5	6.5	6.5	5.5	5.0	5.5	4.0	6.0	4.5
9	10.0	8.0	7.5	6.5	6.5	6.0	5.5	5.0	5.5	4.0	6.0	4.0
10	10.0	8.5	7.5	6.5	6.5	6.0	5.0	4.5	6.0	4.5	6.5	4.5
11	10.0	8.0	7.5	6.5	6.0	5.5	5.5	5.0	5.5	4.0	6.0	4.5
12	9.5	7.5	7.0	6.5	6.0	6.0	6.5	5.5	5.5	4.0	5.0	4.5
13	9.5	8.0	7.5	6.5	6.0	5.5	7.0	6.5	5.5	4.0	6.0	4.5
14	8.5	8.0	7.5	6.5	6.0	5.5	7.0	6.0	5.5	4.5	6.5	4.5
15	9.5	8.0	7.5	6.5	5.5	5.5	5.5	5.5	6.0	5.0	5.5	4.0
16	9.0	8.0	7.5	7.0	5.5	5.5	5.5	5.5	6.0	5.0	5.5	4.5
17	9.0	8.0	8.0	7.0	6.0	5.5	5.5	5.5	6.0	5.0	5.0	4.5
18	8.0	7.0	7.5	7.0	6.0	5.5	5.5	5.0	5.5	5.0	6.0	4.5
19	8.5	8.0	7.0	6.5	6.0	5.5	5.0	5.0	5.5	5.5	6.0	4.5
20	8.0	7.5	7.5	6.5	6.0	5.5	5.0	5.0	6.0	5.0	6.0	5.0
21	8.5	7.5	7.0	6.0	5.5	5.5	5.5	5.0	5.5	5.0	5.5	5.0
22	8.0	7.0	7.0	6.5	5.5	5.0	5.5	5.0	5.5	4.5	6.5	5.0
23	7.5	7.0	6.5	6.5	5.5	5.0	5.5	5.0	5.5	4.5	6.5	5.0
24	7.5	7.0	7.5	6.5	5.5	5.5	5.5	5.0	6.5	5.5	6.5	5.0
25	8.5	7.0	7.0	6.5	5.5	5.5	5.5	4.5	6.0	5.0	7.0	5.0
26	8.0	7.0	7.0	6.5	5.5	5.0	5.0	4.5	6.5	5.5	6.0	5.5
27	7.5	7.0	7.0	6.5	5.5	5.0	5.0	4.5	6.0	5.5	6.5	5.0
28	7.5	6.5	7.0	6.5	5.5	5.0	5.0	3.5	7.0	6.0	7.0	5.0
29	7.5	6.5	7.0	6.5	5.5	5.0	4.5	3.5	6.5	5.0	7.0	5.5
30	7.5	6.5	7.0	6.5	6.0	5.5	4.5	3.5	---	---	7.0	5.0
31	8.0	7.0	---	---	6.0	5.5	4.5	4.0	---	---	6.0	5.0
MONTH	11.0	6.5	8.5	6.0	7.5	5.0	7.0	3.5	7.0	4.0	7.0	4.0

14337600 ROGUE RIVER NEAR MCLEOD, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.5	5.0	10.0	8.5	11.0	9.5	15.0	9.5	11.5	9.0	11.0	9.5
2	7.0	5.0	10.0	8.5	10.5	9.0	14.0	12.0	11.5	9.5	11.0	9.5
3	6.5	5.0	10.0	8.5	11.0	9.5	14.0	12.0	11.0	9.5	11.5	9.5
4	6.5	5.5	10.5	8.5	11.5	10.0	13.5	12.0	11.0	10.0	11.5	9.5
5	6.5	5.5	9.5	8.0	11.0	10.0	14.5	12.0	11.5	9.5	11.5	10.0
6	6.5	5.0	9.5	8.5	11.5	10.0	14.0	12.0	11.5	10.0	11.5	10.0
7	7.0	5.5	10.0	8.0	11.5	10.0	14.5	12.0	11.5	10.0	11.5	10.0
8	6.5	6.0	9.0	7.5	12.0	10.0	14.0	10.5	11.5	9.5	11.5	10.0
9	8.0	6.0	9.0	8.0	12.0	9.5	11.5	10.0	11.5	9.5	12.0	10.0
10	7.5	6.0	8.0	7.5	12.0	10.0	12.0	9.5	12.0	10.0	12.0	10.5
11	7.5	5.0	9.0	8.0	11.5	10.0	12.0	9.5	12.0	10.0	12.0	10.0
12	8.0	6.5	9.5	8.0	11.5	10.0	12.0	9.5	12.0	10.0	11.5	10.0
13	7.5	6.0	10.0	8.0	11.5	10.5	12.0	10.0	11.5	10.0	11.5	10.0
14	7.0	6.0	10.5	8.5	11.0	10.0	---	9.5	11.5	10.0	11.5	9.5
15	8.0	6.0	10.5	8.0	12.0	10.5	12.0	---	11.5	10.5	12.0	10.0
16	8.5	6.5	10.0	8.0	11.5	10.5	12.0	9.5	11.5	10.5	12.0	10.0
17	8.0	6.5	10.5	8.0	12.0	10.0	12.0	10.0	11.0	10.0	12.0	10.0
18	7.5	6.0	10.5	8.5	12.5	10.5	12.0	10.0	11.0	10.0	11.0	9.5
19	8.0	6.5	10.5	8.5	14.0	10.5	11.5	10.0	11.5	10.0	11.0	9.5
20	7.5	6.5	10.5	8.5	14.5	11.5	11.5	10.0	11.5	10.0	11.0	10.0
21	7.0	6.5	10.5	8.5	14.5	12.5	12.0	10.0	12.0	10.0	11.5	9.5
22	7.0	6.5	9.5	8.5	14.0	12.0	12.0	10.0	12.0	10.0	11.5	9.5
23	8.0	7.0	9.5	8.5	13.5	12.0	11.0	10.0	11.0	9.5	11.0	9.0
24	9.0	7.0	9.5	8.5	13.0	9.5	11.5	9.5	12.0	10.5	11.0	8.5
25	9.5	8.0	9.5	8.5	11.0	9.5	11.5	9.5	11.0	9.5	11.0	9.5
26	9.5	7.5	9.5	8.5	11.0	9.5	11.5	10.0	11.0	9.5	11.0	9.5
27	9.5	8.0	10.5	8.5	11.5	9.5	11.5	10.0	11.0	9.5	11.0	9.5
28	9.5	9.0	11.0	9.5	11.5	10.0	12.0	10.0	11.0	9.5	11.0	9.5
29	9.5	8.0	11.0	9.5	12.0	9.5	12.0	10.0	10.0	9.0	11.0	9.5
30	10.0	8.0	11.0	9.0	11.5	9.5	12.0	10.5	11.0	9.5	10.5	9.0
31	---	---	11.0	9.0	---	---	11.0	9.0	11.0	9.5	---	---
MONTH	10.0	5.0	11.0	7.5	14.5	9.0	15.0	9.0	12.0	9.0	12.0	8.5

14337800 ELK CREEK NEAR CASCADE GORGE, OR

LOCATION.--Lat 42°46'25", long 122°40'15", in NW¼ sec.23, T.32 S., R.1 E., Jackson County, Hydrologic Unit 17100307, on right bank 0.1 mi (0.2 km) downstream from Sugarpine Creek, 6.5 mi (10.5 km) northwest of town of Cascade Gorge, and at mile 10.7 (17.2 km).

DRAINAGE AREA.--78.8 mi^2 (204.1 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1973 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,813.83 ft (552.855 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Water-discharge records good. No regulation. Many diversions above station for irrigation.

AVERAGE DISCHARGE.--7 years, 151 ft^3/s (4.276 m^3/s), 26.02 in/yr (661 mm/yr), 109,400 acre-ft/yr (135 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,780 ft^3/s (192 m^3/s) Jan. 15, 1974, gage height, 8.9 ft (2.71 m), from floodmark; minimum daily, 0.72 ft^3/s (0.020 m^3/s) Aug. 24, 1973.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,600 ft^3/s (45.3 m^3/s) and maximum discharge, 3,940 ft^3/s (112 m^3/s) Jan. 13, gage height, 7.46 ft (2.274 m); minimum, 2.6 ft^3/s (0.074 m^3/s) Sept. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	145	97	586	86	191	153	113	58	17	5.5	3.9
2	3.5	90	430	368	86	168	144	103	60	15	5.5	3.7
3	3.5	67	655	253	162	205	131	96	65	14	5.3	3.9
4	3.5	112	374	195	142	279	128	94	60	14	5.3	3.7
5	3.5	210	312	276	128	266	153	88	61	14	5.0	3.7
6	3.3	126	210	306	128	238	219	82	55	14	5.3	3.5
7	3.5	87	153	239	110	201	242	76	52	13	4.8	3.3
8	3.8	64	120	184	101	165	318	72	47	12	4.8	3.3
9	4.0	51	101	159	94	139	483	94	43	12	5.0	3.1
10	3.5	42	99	151	88	123	447	106	40	12	4.5	3.3
11	3.5	37	82	148	82	123	357	106	36	11	4.3	2.9
12	3.5	34	74	2740	76	110	305	106	36	11	4.3	2.9
13	3.5	30	68	3120	72	242	309	96	36	10	4.5	3.5
14	9.7	28	64	2390	70	910	309	88	34	10	3.9	3.9
15	14	26	58	1300	67	599	266	84	33	10	4.1	3.9
16	9.7	30	54	1010	65	403	234	78	31	9.6	4.3	3.3
17	7.0	105	54	931	67	362	227	72	29	8.8	4.1	3.1
18	12	151	52	647	125	392	212	67	26	9.2	3.9	4.1
19	74	151	52	459	270	347	194	65	25	8.8	4.1	5.5
20	97	114	52	352	377	342	262	60	24	9.2	3.9	5.3
21	95	90	145	274	291	318	291	56	22	8.8	3.7	5.8
22	49	197	164	227	274	279	242	55	22	8.4	3.7	5.0
23	58	348	128	188	279	246	219	56	22	8.1	4.1	4.3
24	53	729	151	162	238	223	201	63	22	7.4	3.7	4.3
25	264	472	153	139	201	208	181	84	21	7.4	3.9	3.9
26	108	253	122	120	175	205	162	94	22	7.1	3.7	3.7
27	65	145	103	110	165	198	153	88	21	6.9	3.7	3.7
28	48	114	88	100	246	181	150	82	19	6.6	3.5	3.7
29	38	101	82	95	223	168	133	74	18	6.3	3.7	3.9
30	46	95	103	90	---	162	120	67	18	5.5	3.7	3.5
31	140	---	685	84	---	162	---	61	---	5.5	3.7	---
TOTAL	1233.5	4244	5085	17403	4488	8155	6945	2526	1058	312.6	133.5	115.6
MEAN	39.8	141	164	561	155	263	232	81.5	35.3	10.1	4.31	3.85
MAX	264	729	685	3120	377	910	483	113	65	17	5.5	5.8
MIN	3.3	26	52	84	65	110	120	55	18	5.5	3.5	2.9
CFSM	.51	1.79	2.08	7.12	1.97	3.34	2.94	1.03	.45	.13	.06	.05
IN.	.58	2.00	2.40	8.22	2.12	3.85	3.28	1.19	.50	.15	.06	.05
AC-FT	2450	8420	10090	34520	8900	16180	13780	5010	2100	620	265	229

CAL YR 1979 TOTAL 51164.2 MEAN 140 MAX 1800 MIN 2.4 CFSM 1.78 IN 24.15 AC-FT 101500
WTR YR 1980 TOTAL 51699.2 MEAN 141 MAX 3120 MIN 2.9 CFSM 1.79 IN 24.41 AC-FT 102500

14337800 ELK CREEK NEAR CASCADE GORGE, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: August 1973 to October 1976, August 1977 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum recorded, 28.5°C July 29, 30, 1973; minimum, 0.0°C Nov. 20-22, 1977, many days during November 1978 through February 1979, Jan. 28-30, 1980.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 27.0°C July 27, 28; minimum, 0.0°C Jan. 28-30.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	17.5	11.0	9.0	7.5	7.0	5.5	7.5	6.5	4.5	2.5	8.0	5.5
2	18.0	11.0	9.0	8.0	7.5	6.5	6.5	5.5	5.0	3.5	9.5	6.5
3	18.5	11.5	9.5	8.0	8.5	7.0	7.5	6.5	6.5	4.5	7.5	6.5
4	18.5	12.0	9.0	8.5	7.5	6.5	7.5	6.5	5.5	3.5	8.5	6.5
5	18.0	12.0	10.0	8.5	6.5	6.0	7.5	6.5	5.5	4.0	8.5	6.5
6	17.0	14.0	9.5	8.0	6.5	6.0	6.5	5.5	7.0	4.5	8.5	6.0
7	17.5	12.0	9.5	7.0	6.5	5.5	6.0	5.5	6.0	3.0	9.0	5.5
8	17.0	11.5	8.5	5.5	7.0	5.5	6.5	5.5	5.5	2.5	8.5	5.0
9	16.5	10.0	8.0	5.0	7.5	5.5	6.0	5.5	6.0	2.5	9.5	4.5
10	16.0	10.0	7.5	4.5	7.5	4.0	5.5	3.0	7.0	4.0	10.0	4.5
11	16.0	10.0	7.0	4.0	4.0	2.5	4.5	3.0	6.0	2.5	7.0	4.5
12	16.0	10.5	6.5	3.5	5.0	2.5	7.5	4.5	5.5	2.5	6.0	4.0
13	16.5	12.0	6.5	3.5	4.5	2.5	8.0	7.5	5.5	2.5	6.0	4.5
14	13.5	13.0	6.0	3.0	4.0	2.0	8.0	7.0	5.5	3.0	6.5	5.0
15	15.5	12.5	7.0	3.5	3.5	1.5	7.5	6.5	7.5	4.5	6.0	4.5
16	15.0	11.0	8.0	7.0	3.5	1.0	7.5	7.0	6.5	5.0	7.0	4.0
17	14.5	11.0	9.0	7.5	5.5	3.5	7.5	5.5	8.0	5.5	6.0	4.5
18	12.0	10.5	7.5	5.5	6.5	5.0	5.5	4.5	7.0	6.0	7.5	4.5
19	11.0	9.0	7.0	5.5	7.5	6.0	5.0	3.5	6.5	6.0	8.5	5.5
20	9.0	8.5	6.5	4.5	7.0	6.0	5.5	3.5	7.0	5.5	7.0	5.0
21	10.5	8.5	6.0	3.5	6.5	5.0	5.5	3.5	6.5	5.0	7.0	4.5
22	9.5	8.5	6.5	5.5	5.5	4.5	6.0	4.0	6.0	5.5	8.0	4.5
23	11.0	9.0	6.5	6.0	5.0	4.5	6.0	4.0	6.5	4.5	8.5	4.5
24	11.0	10.0	7.5	6.0	5.5	4.5	6.5	4.0	8.0	6.0	8.5	4.0
25	10.5	9.5	6.5	5.5	6.0	5.0	5.5	3.0	8.0	6.0	8.5	5.0
26	11.0	9.0	6.0	5.0	5.5	4.0	4.0	2.0	9.0	7.0	7.0	5.0
27	11.0	9.0	5.5	4.0	4.5	3.5	3.5	1.0	8.5	7.5	8.5	4.5
28	10.5	7.5	6.0	4.5	5.0	3.0	2.0	.0	8.5	6.5	9.0	3.5
29	9.0	6.5	6.0	4.5	5.5	4.5	.5	.0	8.0	5.5	8.5	4.0
30	9.0	7.0	7.0	5.0	6.5	4.5	.5	.0	---	---	9.0	4.5
31	9.5	8.5	---	---	7.0	5.5	2.5	.5	---	---	5.0	3.5
MONTH	18.5	6.5	10.0	3.0	8.5	1.0	8.0	.0	9.0	2.5	10.0	3.5

14337800 ELK CREEK NEAR CASCADE GORGE, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.0	3.5	15.0	7.0	15.0	10.0	---	---	26.0	16.5	21.5	12.5
2	8.0	2.5	15.5	8.5	10.5	8.5	---	---	25.0	15.5	20.0	14.0
3	7.0	3.5	17.0	8.0	14.0	8.0	---	---	24.5	15.5	20.5	12.0
4	7.0	5.0	17.5	10.0	13.0	7.5	---	---	24.5	15.5	21.5	12.5
5	7.5	5.5	16.5	11.0	13.5	8.5	---	---	23.5	14.5	21.5	13.5
6	6.5	3.5	15.0	10.5	13.0	9.5	---	---	23.0	13.5	21.5	14.5
7	7.0	4.5	16.0	7.5	16.0	10.0	---	---	23.5	14.0	22.0	14.5
8	7.0	5.0	11.5	8.5	18.0	10.5	---	---	24.0	15.0	21.0	12.5
9	8.0	6.0	9.5	7.5	19.0	12.0	22.0	---	24.5	14.5	21.0	13.5
10	8.5	5.5	8.5	7.0	19.0	10.0	22.5	14.5	25.0	16.0	22.0	14.5
11	10.0	4.5	11.0	7.5	14.5	11.5	23.0	14.0	25.5	16.5	21.0	13.0
12	11.5	5.5	13.5	8.5	---	11.0	23.0	15.0	24.0	14.5	20.0	14.5
13	10.5	6.0	12.5	9.0	---	---	23.0	14.5	24.5	15.0	16.0	12.0
14	9.5	7.0	13.5	8.5	---	---	23.5	16.0	24.0	15.5	15.5	10.0
15	11.5	6.0	14.0	6.5	---	---	24.0	15.0	23.5	14.0	18.0	9.5
16	13.0	5.5	15.0	6.5	---	---	25.0	16.0	23.5	14.0	19.0	10.5
17	12.5	7.0	16.5	7.0	---	---	24.5	15.5	22.0	14.5	18.0	11.5
18	13.0	6.0	16.5	9.0	---	---	24.5	16.0	22.5	15.5	17.5	14.0
19	14.0	7.5	18.5	9.5	---	---	24.0	15.0	22.5	13.0	17.0	12.0
20	10.0	6.5	19.5	10.0	---	---	25.5	16.0	23.0	13.5	16.0	12.5
21	8.0	5.5	17.0	11.0	---	---	26.5	18.0	23.0	13.5	16.0	9.5
22	8.0	6.0	12.0	9.0	---	---	26.0	18.5	22.5	13.0	16.5	9.0
23	12.0	7.5	11.0	7.5	---	---	25.5	17.5	23.0	14.0	17.5	10.0
24	12.5	8.0	10.0	7.0	---	---	25.5	16.5	23.5	14.0	18.0	10.5
25	13.0	5.0	11.0	7.0	---	---	25.0	16.0	23.5	14.5	18.0	11.0
26	15.0	7.5	10.0	7.0	---	---	26.0	16.5	22.5	14.0	18.0	12.5
27	16.5	8.0	12.5	7.5	---	---	27.0	17.5	22.0	14.0	17.0	11.5
28	14.5	9.5	14.5	8.0	---	---	27.0	18.5	21.0	12.5	17.5	11.0
29	14.5	8.5	16.0	8.0	---	---	26.5	18.0	17.0	12.5	17.0	10.0
30	14.0	6.0	16.5	8.5	---	---	26.5	17.0	18.0	11.5	17.5	10.5
31	---	---	17.5	9.0	---	---	26.5	18.0	21.0	12.5	---	---
MONTH	16.5	2.5	19.5	6.5	19.0	7.5	27.0	14.0	26.0	11.5	22.0	9.0

14337870 WEST BRANCH ELK CREEK NEAR TRAIL, OR

LOCATION.--Lat 42°42'40", long 122°44'55", in SW¼ sec.7, T.33 S., R.1 E., Jackson County, Hydrologic Unit 17100307, on Bureau of Land Management land, on left bank 300 ft (91 m) upstream from Spot Creek and 5.3 mi (8.5 km) northeast of Trail.

DRAINAGE AREA.--14.2 mi² (36.8 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1973 to September 1976, October 1977 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,773.24 ft (540.484 m) National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark).

REMARKS.--Records good. No regulation or diversions above station.

AVERAGE DISCHARGE.--6 years, 25.6 ft³/s (0.725 m³/s), 24.48 in/yr (622 mm/yr), 18,550 acre-ft/yr (22.9 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,410 ft³/s (39.9 m³/s) Jan. 15, 1974, gage height, 5.30 ft (1.615 m), from rating curve extended above 600 ft³/s (17.0 m³/s) on basis of slope-area measurement of peak flow; minimum, 0.80 ft³/s (0.023 m³/s) Oct. 6, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft³/s (8.50 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 2	2200	337	9.54	2.91	0.887	Jan. 12	0900	*742	21.0	*3.77	1.149

Minimum, 0.81 ft³/s (0.023 m³/s) Sept. 5-12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	15	15	107	10	29	19	10	8.4	3.4	1.4	1.2
2	1.3	11	117	61	9.7	24	18	9.3	9.3	3.2	1.4	1.2
3	1.3	8.1	153	38	18	30	18	8.7	12	3.0	1.4	1.2
4	1.2	12	53	29	18	54	17	8.7	12	3.0	1.4	.98
5	1.2	23	41	27	17	48	20	8.1	10	3.0	1.4	.90
6	1.2	16	27	25	15	34	28	7.5	9.3	3.0	1.4	.90
7	1.4	11	18	21	14	25	29	7.2	8.4	2.8	1.4	.90
8	1.4	7.8	12	18	13	20	46	7.5	7.5	2.6	1.3	.90
9	1.5	6.1	9.5	17	12	17	68	13	6.9	2.6	1.3	.81
10	1.3	5.3	8.1	17	12	16	63	14	6.4	2.6	1.3	.90
11	1.3	4.6	6.9	17	11	15	45	23	6.1	2.4	1.2	.90
12	1.3	4.2	6.3	510	10	13	35	22	6.1	2.6	1.2	.90
13	1.4	4.0	5.5	478	9.7	30	30	17	5.9	2.6	1.2	1.2
14	3.4	3.8	5.1	311	9.3	173	26	13	5.9	2.4	1.2	1.3
15	2.9	3.6	4.6	167	8.7	103	21	12	5.4	2.4	1.3	1.1
16	2.0	5.1	4.2	130	8.4	66	18	10	5.4	2.1	1.2	.98
17	1.7	18	4.0	143	9.0	60	16	9.0	5.4	2.1	1.2	.90
18	5.3	22	3.8	89	17	62	14	8.1	5.1	2.1	1.2	1.3
19	13	22	4.0	62	46	57	13	7.5	4.9	2.1	1.2	1.5
20	24	17	4.2	44	65	60	20	7.2	4.7	2.1	1.1	1.4
21	17	13	18	32	48	50	31	6.9	4.4	2.0	1.1	1.5
22	9.1	27	21	25	37	37	30	7.2	4.4	1.8	1.1	1.3
23	9.8	48	17	20	36	32	27	7.8	4.4	2.0	1.1	1.1
24	11	145	21	18	30	30	22	10	4.2	2.0	1.1	1.1
25	47	61	21	17	24	29	18	23	4.2	1.8	1.2	.98
26	17	34	16	15	21	27	17	27	4.0	1.8	1.2	.90
27	9.5	23	12	14	21	25	14	19	3.8	1.7	1.1	.98
28	6.9	17	11	12	42	22	13	15	3.6	1.7	1.2	.98
29	5.5	15	9.8	11	38	20	12	12	3.6	1.7	1.2	.98
30	9.5	15	14	10	---	20	11	10	3.6	1.4	1.3	.98
31	14	---	178	11	---	20	---	9.0	---	1.4	1.2	---
TOTAL	225.8	617.6	841.0	2496	629.8	1248	759	369.7	185.3	71.4	38.5	32.17
MEAN	7.28	20.6	27.1	80.5	21.7	40.3	25.3	11.9	6.18	2.30	1.24	1.07
MAX	47	145	178	510	65	173	68	27	12	3.4	1.4	1.5
MIN	1.2	3.6	3.8	10	8.4	13	11	6.9	3.6	1.4	1.1	.81
CFSM	.51	1.45	1.91	5.67	1.53	2.84	1.78	.84	.44	.16	.09	.08
IN.	.59	1.62	2.20	6.54	1.65	3.27	1.99	.97	.49	.19	.10	.08
AC-FT	448	1230	1670	4950	1250	2480	1510	733	368	142	76	64

CAL YR 1979 TOTAL 7060.90 MEAN 19.3 MAX 300 MIN 1.2 CFSM 1.36 IN 18.50 AC-FT 14010
WTR YR 1980 TOTAL 7514.27 MEAN 20.5 MAX 510 MIN .81 CFSM 1.44 IN 19.68 AC-FT 14900

14337870 WEST BRANCH ELK CREEK NEAR TRAIL, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: August 1977 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 25.5°C Aug. 8, 1978; minimum, 0.0°C Nov. 20-22, 1977, many days during November 1978 to February 1979, and Jan. 28-31, 1980.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 23.0°C July 21, 22, 27-29; minimum, 0.0°C Jan. 28-31.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	16.0	11.5	9.0	7.0	6.5	4.5	---	---	4.5	2.5	---	---
2	16.0	10.0	9.0	8.0	8.0	6.0	---	---	5.0	4.0	---	---
3	16.5	11.5	9.5	8.0	8.5	7.5	---	---	6.5	5.0	---	---
4	16.5	12.5	9.0	8.5	7.5	6.5	---	---	6.0	4.0	---	---
5	17.0	12.0	9.5	8.5	6.5	6.0	---	---	6.0	4.5	---	---
6	16.0	14.0	9.5	8.0	6.0	5.5	---	---	6.5	4.5	---	---
7	16.5	12.0	9.0	7.0	6.0	5.0	---	---	5.5	3.5	---	---
8	15.5	11.5	8.0	6.0	6.0	5.0	---	---	5.0	3.0	---	---
9	15.0	10.5	7.5	5.5	6.5	5.0	---	---	5.5	3.0	---	---
10	15.0	10.5	6.5	5.0	6.5	3.5	---	---	6.5	4.0	---	---
11	15.0	10.5	6.0	4.0	3.5	2.0	---	---	5.5	3.0	---	---
12	15.0	10.5	5.5	3.5	4.0	2.0	---	---	5.5	3.0	---	---
13	15.0	12.0	5.5	3.5	3.5	2.0	---	---	5.5	3.0	---	---
14	13.0	12.0	5.5	3.5	3.0	1.5	---	---	6.0	3.5	---	---
15	14.0	12.0	6.5	3.5	2.0	1.0	---	---	7.0	4.5	---	---
16	13.5	10.5	7.5	6.5	2.5	.5	---	---	6.5	5.0	---	---
17	13.5	11.0	8.5	7.5	5.0	2.5	---	---	8.0	6.0	---	---
18	12.0	10.5	7.5	5.5	6.0	4.5	---	---	7.0	6.0	---	---
19	11.0	9.5	6.5	5.0	6.5	5.5	---	---	---	---	---	---
20	9.5	8.5	5.5	4.0	6.5	5.5	---	---	---	---	---	---
21	10.0	8.5	5.0	3.5	6.0	5.5	---	---	---	---	---	---
22	9.5	9.0	6.5	5.0	---	---	---	---	---	---	---	---
23	11.0	9.0	6.0	6.0	---	---	---	---	---	---	---	---
24	11.0	10.0	8.0	6.0	---	---	6.0	---	---	---	---	---
25	11.0	9.0	7.0	5.5	---	---	5.0	3.0	---	---	---	---
26	10.5	9.0	6.0	4.5	---	---	4.0	2.5	---	---	---	---
27	10.5	9.0	5.0	3.5	---	---	3.5	1.0	---	---	8.0	5.0
28	9.5	7.5	5.0	3.5	---	---	1.5	.0	---	---	8.5	3.5
29	8.5	6.5	5.5	4.0	---	---	.5	.0	---	---	8.5	4.5
30	8.5	7.0	6.0	4.5	---	---	.0	.0	---	---	9.0	4.5
31	9.5	8.5	---	---	---	---	2.5	.0	---	---	5.0	4.0
MONTH	17.0	6.5	9.5	3.5	8.5	.5	6.0	.0	8.0	2.5	9.0	3.5

14337870 WEST BRANCH ELK CREEK NEAR TRAIL, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.5	3.5	14.0	7.5	13.5	9.5	20.0	12.5	21.5	15.0	17.0	11.5
2	8.0	3.0	14.5	9.0	10.0	8.5	20.0	13.5	21.0	14.0	16.5	13.0
3	7.0	3.5	16.0	8.5	10.5	8.0	16.0	12.5	20.5	14.0	17.0	11.0
4	7.0	5.0	17.0	10.0	11.0	8.0	16.0	13.0	20.5	14.0	17.5	11.5
5	7.0	5.5	15.0	11.5	11.5	9.0	17.0	12.5	19.5	13.5	18.0	12.5
6	6.0	3.5	13.5	10.5	12.0	9.5	18.5	11.5	19.0	12.0	18.5	13.0
7	7.0	4.5	15.0	8.0	14.5	10.0	20.0	12.5	19.5	12.5	18.5	13.5
8	7.0	5.5	11.5	9.0	15.5	10.5	19.5	13.5	20.0	13.5	17.0	11.5
9	7.5	6.0	9.5	8.0	16.0	11.5	19.0	13.5	20.0	13.0	18.5	13.0
10	9.0	6.0	8.5	7.0	16.0	10.0	19.0	12.5	21.0	14.0	18.5	13.5
11	10.0	5.0	10.0	8.0	13.5	10.5	19.0	12.0	21.0	15.0	17.5	12.5
12	11.5	6.0	11.5	8.5	13.0	10.5	19.5	13.0	20.0	13.5	17.0	13.5
13	11.0	7.0	11.5	8.5	13.0	10.0	19.5	12.5	20.0	14.0	14.0	11.0
14	9.0	7.5	12.0	8.5	12.0	10.0	19.5	14.0	19.5	14.0	14.0	9.0
15	12.0	6.0	12.0	7.0	16.5	9.0	20.5	13.0	19.0	13.0	14.5	9.0
16	13.5	6.0	13.5	7.0	13.5	11.0	21.0	14.0	19.0	13.0	15.5	10.0
17	13.5	7.5	14.5	7.5	17.0	10.0	21.0	14.0	18.5	13.0	16.0	11.0
18	14.0	6.5	15.0	9.0	17.5	10.0	20.5	14.5	18.0	14.0	15.0	12.5
19	14.0	9.0	16.5	10.0	17.5	10.5	21.0	13.5	18.0	11.5	14.5	10.5
20	11.0	7.0	17.5	10.5	18.5	12.0	22.0	14.5	18.5	12.5	13.5	11.5
21	8.0	6.0	15.0	11.0	18.5	12.0	23.0	16.0	18.0	12.0	13.0	9.0
22	8.5	7.0	11.5	8.5	15.0	12.5	23.0	17.0	18.0	12.0	13.0	8.5
23	11.0	7.5	10.5	7.5	14.5	11.5	22.0	16.0	18.5	12.5	14.0	9.5
24	10.5	8.0	10.5	7.0	13.5	11.0	21.5	15.0	19.0	13.0	15.0	10.5
25	12.5	7.0	10.0	7.5	15.0	11.5	21.5	14.0	19.0	13.0	15.0	10.5
26	14.0	8.0	9.5	7.0	14.0	10.5	22.0	15.0	18.5	12.5	16.0	12.0
27	16.0	9.0	11.5	8.0	17.5	9.5	23.0	16.0	17.5	13.0	15.0	11.0
28	14.5	10.5	12.5	8.5	19.0	11.5	23.0	16.5	17.0	11.5	15.0	11.0
29	13.5	8.5	14.0	8.5	18.5	12.0	23.0	16.5	14.5	11.0	14.0	9.5
30	13.5	7.0	14.5	9.0	19.0	11.5	22.5	15.5	15.5	10.5	14.5	10.0
31	---	---	15.5	9.5	---	---	22.5	16.0	17.0	11.5	---	---
MONTH	16.0	3.0	17.5	7.0	19.0	8.0	23.0	11.5	21.5	10.5	18.5	8.5

14338000 ELK CREEK NEAR TRAIL, OR

LOCATION.--Lat 42°39'50", long 122°44'50", in SW¼ sec.30, T.33 S., R.1 E., Jackson County, Hydrologic Unit 17100307, on right bank 3.3 mi (5.3 km) northeast of Trail and at mile 0.4 (0.6 km).

DRAINAGE AREA.--133 mi^2 (344 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1945 to current year. Prior to March 1946 monthly discharge only, published in WSP 1318.

GAGE.--Water-stage recorder. Datum of gage is 1,456.56 ft (443.959 m) National Geodetic Vertical Datum of 1929. Prior to July 5, 1946, nonrecording gage at various sites within 1.0 mi (1.6 km) of present site at different datums. July 5, 1946, to June 22, 1950, nonrecording gage, and June 23, 1950, to May 23, 1954, water-stage recorder, at site 0.3 mi (0.5 km) upstream at datum 12.14 ft (3.700 m) higher.

REMARKS.--Water-discharge records good. No regulation. Diversions for irrigation above station.

AVERAGE DISCHARGE.--35 years, 231 ft^3/s (6.542 m^3/s), 167,400 acre-ft/yr (206 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,200 ft^3/s (544 m^3/s) Dec. 22, 1964, gage height, 18.84 ft (5.742 m), from rating curve extended above 4,700 ft^3/s (133 m^3/s) on basis of slope-area measurement of peak flow; minimum, 0.40 ft^3/s (0.011 m^3/s) Aug. 16, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,700 ft^3/s (76.5 m^3/s) and maximum discharge, 6,660 ft^3/s (189 m^3/s) Jan. 13, gage height, 10.41 ft (3.173 m); minimum, 2.6 ft^3/s (0.074 m^3/s) Sept. 11, 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	251	196	929	117	298	197	129	75	23	9.6	4.2
2	4.5	141	680	607	113	255	186	119	78	22	9.0	4.7
3	4.4	99	1230	432	200	294	172	112	88	19	7.9	5.2
4	4.3	143	640	348	209	467	165	105	84	20	7.9	4.2
5	4.2	344	553	382	189	432	191	100	84	21	7.3	4.7
6	3.9	226	378	432	186	364	279	96	78	21	7.3	4.7
7	4.0	143	273	352	167	298	328	89	74	20	6.7	4.2
8	4.3	99	205	289	155	248	422	87	67	17	6.7	4.2
9	4.5	72	160	247	143	212	634	115	61	17	6.7	4.2
10	4.5	57	146	247	134	186	607	139	56	18	6.2	3.4
11	4.4	47	119	222	127	180	467	152	54	16	5.2	3.2
12	3.5	40	105	4240	119	165	383	148	54	15	4.7	3.2
13	3.5	35	90	5220	112	302	369	131	53	10	4.7	3.7
14	6.1	32	78	3530	107	1470	346	119	51	10	5.2	4.7
15	14	29	69	1940	101	1000	290	108	49	12	5.2	4.7
16	14	37	63	1430	97	656	255	100	45	12	5.7	4.7
17	11	183	57	1450	99	559	238	92	44	11	5.7	4.2
18	13	285	54	972	157	607	222	85	41	11	5.2	5.2
19	99	293	55	684	398	537	203	80	38	11	4.7	6.7
20	174	215	52	515	596	515	262	75	37	11	5.2	6.7
21	215	153	199	398	467	472	369	70	33	11	5.2	7.3
22	80	289	297	324	408	393	311	71	32	11	4.2	7.9
23	90	668	226	269	422	341	272	73	35	10	4.7	7.3
24	78	1290	262	231	350	302	245	83	32	10	4.7	6.7
25	475	795	281	203	290	272	216	143	32	11	4.2	6.2
26	215	490	215	180	255	262	191	165	32	11	4.2	5.7
27	109	340	171	165	241	255	175	132	32	10	4.2	4.7
28	69	254	141	145	379	228	170	113	28	10	4.2	4.2
29	52	215	123	131	355	209	150	100	27	10	3.7	4.2
30	65	199	148	131	---	200	136	89	25	10	4.7	4.2
31	212	---	1070	122	---	203	---	81	---	9.6	4.7	---
TOTAL	2045.6	7464	8336	26767	6693	12182	8451	3301	1519	430.6	175.5	149.1
MEAN	66.0	249	269	863	231	393	282	106	50.6	13.9	5.66	4.97
MAX	475	1290	1230	5220	596	1470	634	165	88	23	9.6	7.9
MIN	3.5	29	52	122	97	165	136	70	25	9.6	3.7	3.2
AC-FT	4060	14800	16530	53090	13280	24160	16760	6550	3010	854	348	296

CAL YR 1979 TOTAL 76448.2 MEAN 209 MAX 2870 MIN 3.5 AC-FT 151600
WTR YR 1980 TOTAL 77513.8 MEAN 212 MAX 5220 MIN 3.2 AC-FT 153700

14338000 ELK CREEK NEAR TRAIL, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1973 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: June 1973 to current year.

INSTRUMENTATION.--Enviro-Lab temperature unit since June 1973.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 31.5°C July 17, 1979; minimum, 0.0°C many days during December 1976 to February 1977, Nov. 20-22, 1977, Nov. 13-15, Dec. 8, 19, 20, 1978, Jan. 28-31, 1980.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 29.5°C July 30; minimum, 0.0°C Jan. 28-31.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	19.0	14.0	10.0	8.0			---	---	4.0	2.0	7.5	5.5
2	19.5	14.5	9.0	8.5			---	---	5.0	4.0	9.5	6.5
3	20.0	15.0	10.0	8.5			7.5	---	6.5	5.0	8.5	7.5
4	19.5	15.5	9.5	8.5			7.5	6.5	5.5	3.5	9.0	6.5
5	19.5	15.0	10.5	8.5			7.5	7.0	5.5	4.0	9.0	6.5
6	18.5	16.5	9.5	8.0			7.0	5.5	6.5	5.0	9.5	6.0
7	18.5	15.0	9.5	7.0			6.0	5.5	5.5	3.0	9.5	6.0
8	18.5	14.5	8.5	6.0			6.5	5.0	5.0	2.5	9.0	5.5
9	18.0	13.0	8.0	5.5			6.0	5.5	5.5	2.5	9.0	4.5
10	17.5	13.0	7.5	5.0			5.5	3.0	7.0	4.0	9.5	4.5
11	17.5	13.0	6.5	4.0			5.0	3.5	5.5	3.0	8.5	6.0
12	17.0	13.0	5.5	3.5			7.5	4.5	5.0	2.5	6.0	4.5
13	17.5	14.5	5.5	3.0			8.0	7.5	5.5	3.0	6.5	5.5
14	16.5	15.0	5.5	3.0			9.0	7.5	5.0	3.5	7.0	5.5
15	17.5	14.0	6.0	3.5			7.5	7.0	7.0	4.5	6.5	5.0
16	17.0	13.5	7.5	6.0			7.5	7.0	6.5	5.5	7.5	4.0
17	16.5	13.5	---	7.5			7.5	5.5	7.5	6.0	6.5	4.5
18	16.0	13.0	---	---			5.5	4.0	7.0	6.5	8.5	5.0
19	13.0	11.5	---	---			5.0	3.0	7.0	6.0	9.5	5.5
20	11.5	9.5	---	---			5.0	3.0	7.5	6.0	7.5	5.5
21	11.0	9.0	---	---			5.0	3.5	7.0	5.0	6.5	4.5
22	11.0	9.5	---	---			5.5	3.5	6.5	5.5	8.5	4.5
23	11.5	9.5	---	---			5.5	3.0	6.5	4.0	9.0	5.0
24	12.0	11.0	---	---			6.0	3.5	8.5	6.0	8.5	4.0
25	12.0	10.5	---	---			5.0	3.0	8.0	6.5	9.5	5.0
26	11.5	9.5	---	---			4.0	2.0	9.0	7.0	7.5	5.5
27	12.0	10.0	---	---			4.0	1.5	8.5	8.0	9.0	5.0
28	12.0	9.0	---	---			2.0	.0	9.0	7.5	9.0	3.5
29	11.0	7.5	---	---			.0	.0	8.0	5.5	9.0	4.5
30	10.0	8.0	---	---			.0	.0	---	---	9.5	5.0
31	10.5	8.0	---	---			2.0	.0	---	---	6.5	4.5
MONTH	20.0	7.5	10.5	3.0			9.0	.0	9.0	2.0	9.5	3.5

14338000 ELK CREEK NEAR TRAIL, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.5	4.0	15.0	9.0	17.5	14.0	26.0	17.5	28.5	20.0	23.0	16.0
2	8.0	3.0	16.5	11.0	14.0	11.0	26.0	19.0	27.5	19.0	21.0	17.0
3	7.5	4.0	17.5	10.5	15.0	10.0	22.5	18.0	27.5	18.5	22.5	15.0
4	7.0	5.5	18.5	12.5	14.5	10.0	21.0	17.5	27.0	18.5	23.5	16.0
5	8.0	6.0	17.0	13.5	14.0	11.0	23.5	17.0	25.5	18.0	24.5	17.5
6	6.5	5.0	16.5	12.5	15.0	11.5	24.5	16.0	25.5	16.5	23.5	18.0
7	7.5	4.5	17.0	10.0	18.5	12.0	26.0	17.5	26.5	17.0	24.0	18.0
8	7.5	5.5	13.5	11.5	19.5	13.5	25.0	18.5	26.0	18.5	23.5	16.5
9	8.5	6.5	11.5	9.0	21.5	15.0	25.0	18.5	26.5	18.0	24.0	17.5
10	10.0	6.0	9.0	8.0	20.5	13.5	25.5	17.0	28.0	19.0	24.0	18.0
11	11.0	5.0	11.5	8.0	17.0	14.5	25.5	17.0	27.5	20.0	22.5	17.5
12	12.5	6.0	13.5	9.5	16.5	13.5	26.0	17.5	26.5	18.5	20.5	17.5
13	11.5	6.5	13.0	10.0	14.5	12.5	26.5	17.5	26.5	18.5	18.5	15.5
14	10.0	8.0	14.0	10.0	15.5	12.0	26.5	19.5	25.5	18.5	18.0	13.0
15	12.5	6.5	14.5	9.0	20.0	11.0	27.5	18.5	25.0	17.5	19.5	13.0
16	13.0	6.5	16.0	9.0	17.5	15.0	28.0	19.5	25.0	17.5	21.0	14.0
17	13.0	8.0	17.0	10.0	20.5	12.5	28.0	19.5	24.0	17.5	20.0	15.0
18	13.0	7.0	18.0	11.5	22.0	14.0	27.0	19.5	24.0	18.5	20.0	17.0
19	14.0	9.0	19.5	12.5	22.0	15.0	---	---	24.5	16.5	19.5	14.5
20	12.5	8.0	20.5	13.5	24.0	16.5	---	---	24.5	17.0	18.0	16.0
21	9.0	6.5	19.0	14.5	24.0	16.5	---	---	24.0	16.5	18.5	12.5
22	9.0	7.0	15.0	11.5	20.0	17.0	---	---	23.5	16.0	19.0	12.0
23	12.0	8.0	13.0	9.5	19.5	15.5	---	---	24.5	16.5	19.5	13.0
24	14.0	9.0	13.0	9.5	17.0	14.5	---	---	24.5	17.5	20.5	14.0
25	13.5	7.5	12.0	9.0	19.5	14.0	---	---	24.5	17.0	20.5	14.5
26	15.0	9.0	12.0	8.0	19.0	15.0	---	---	23.5	17.0	21.0	16.0
27	17.0	10.0	14.5	9.0	22.0	13.0	---	---	23.5	17.0	19.5	15.0
28	15.5	11.5	15.5	10.0	24.5	16.0	---	---	22.0	16.0	19.5	15.0
29	15.0	9.5	17.0	10.5	24.0	17.0	---	---	18.5	15.0	19.0	13.5
30	14.5	8.0	17.5	11.5	25.0	16.5	29.5	---	21.5	13.5	19.0	14.0
31	---	---	18.5	12.0	---	---	29.0	21.0	23.0	16.0	---	---
MONTH	17.0	3.0	20.5	8.0	25.0	10.0	29.5	16.0	28.5	13.5	24.5	12.0

14339000 ROGUE RIVER AT DODGE BRIDGE, NEAR EAGLE POINT, OR

LOCATION.--Lat 42°31'30", long 122°50'30", in SE¼ sec.17, T.35 S., R.1 W., Jackson County, Hydrologic Unit 17100307, on right bank 50 ft (15 m) upstream from Dodge Bridge, 0.7 mi (1.1 km) downstream from Reese Creek, 4.3 mi (6.9 km) northwest of Eagle Point, and at mile 138.61 (223.02 km).

DRAINAGE AREA.--1,215 mi² (3,147 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1938 to current year.

REVISED RECORDS.--WSP 1094: 1942(M), 1943, 1945(M), 1946. WSP 1738: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,271.39 ft (387.520 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 21, 1938, nonrecording gage, Dec. 21, 1938, to Aug. 15, 1968, water-stage recorder, at datum 2.27 ft (0.692 m) higher, Aug. 16, 1968, to Sept. 30, 1976, water-stage recorder, at datum 1.00 ft (0.305 m) higher.

REMARKS.--Water-discharge records excellent except those for Jan. 12, 13, which are fair. Flow regulated since February 1977 by Lost Creek Lake (see station 14335040). Diversions for irrigation above station; most of low flow of Big Butte Creek is diverted near Butte Falls.

AVERAGE DISCHARGE.--42 years, 2,602 ft³/s (73.69 m³/s), 1,885,000 acre-ft/yr (2.32 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 87,600 ft³/s (2,480 m³/s) Dec. 22, 1964, gage height, 12.78 ft (3.895 m), datum then in use, from rating curve extended above 23,000 ft³/s (651 m³/s); minimum, 567 ft³/s (16.1 m³/s) Feb. 18, 1977, result of closure of Lost Creek dam, minimum prior to that time 611 ft³/s (17.3 m³/s) Aug. 6, 14, 29, Sept. 9, 1940.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 18,500 ft³/s (524 m³/s) Jan. 13, gage height, 8.25 ft (2.515 m), from high-water mark in well; minimum, 1,080 ft³/s (30.6 m³/s) Feb. 16, 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1410	1430	2310	2930	1240	1500	1820	2730	1740	1980	2260	1570
2	1250	1290	4480	2190	1160	1420	1760	2680	1750	1990	2270	1570
3	1160	1240	5870	1870	1690	1590	1630	2680	1800	2010	2270	1570
4	1160	1260	5490	1730	1500	1960	1540	2660	1770	2060	2270	1550
5	1160	1750	5150	1750	1390	1880	1520	2650	1770	2050	2270	1560
6	1150	2440	3640	1810	1420	2080	1760	2650	1760	2050	2270	1560
7	1160	1940	3270	1690	1300	1960	1860	2620	1760	2050	2270	1570
8	1150	1380	2820	1600	1260	1860	1980	2600	1740	2030	2270	1390
9	1150	1220	2330	1550	1230	1790	2470	2540	1720	2020	2270	1200
10	1140	1220	2260	1740	1190	1730	2700	2490	1720	2020	2270	1200
11	1140	1170	2220	2290	1170	1730	2730	2470	1940	2020	2260	1200
12	1140	1160	2060	10700	1140	1700	2380	2410	2020	2020	2270	1200
13	1150	1150	2010	13400	1120	2020	2310	2190	2050	2030	2270	1200
14	1180	1140	1910	9590	1100	4890	2360	1740	2020	1990	2260	1200
15	1200	1140	1660	11400	1100	4280	2410	1570	2010	2030	2270	1200
16	1130	1160	1650	14000	1090	3560	2340	1810	1990	2080	2270	1190
17	1110	1500	1600	13500	1100	3230	2410	2020	2020	2080	2270	1190
18	1140	1660	1580	11200	1260	3220	2650	2010	2080	2190	2270	1200
19	1260	1690	1580	7310	1760	2980	2770	1990	2070	2220	2270	1210
20	1380	1630	1560	5450	2080	2900	3020	1960	2060	2220	2180	1210
21	1470	1520	2010	4320	1770	2870	3880	2020	2060	2220	1930	1200
22	1260	1930	2140	3590	1730	2700	4060	2140	2050	2220	1680	1190
23	1250	2770	2010	3450	1730	2600	3400	2270	2050	2220	1550	1190
24	1240	4640	2160	3350	1590	2340	3020	2360	2050	2230	1540	1190
25	1880	3250	2110	3270	1480	1990	2950	2490	2060	2260	1520	1180
26	1470	3560	1870	2760	1440	1970	2900	2570	2050	2260	1560	1190
27	1270	3150	1670	2470	1410	1970	2870	2290	2050	2250	1570	1190
28	1240	2980	1600	1980	1880	1880	2850	1940	2010	2250	1570	1190
29	1200	2870	1580	1460	1640	1830	2800	1770	1990	2260	1580	1190
30	1240	2460	1650	1430	---	1810	2770	1760	1990	2250	1570	1180
31	1360	---	3120	1430	---	1810	---	1740	---	2260	1560	---
TOTAL	38600	57700	77370	147210	40970	72050	75920	69820	58150	65820	62910	38630
MEAN	1245	1923	2496	4749	1413	2324	2531	2252	1938	2123	2029	1288
MAX	1880	4640	5870	14000	2080	4890	4060	2730	2080	2260	2270	1570
MIN	1110	1140	1560	1430	1090	1420	1520	1570	1720	1980	1520	1180
AC-FT	76560	114400	153500	292000	81260	142900	150600	138500	115300	130600	124800	76620

CAL YR 1979 TOTAL 773560 MEAN 2119 MAX 7440 MIN 943 AC-FT 1534000
WTR YR 1980 TOTAL 805150 MEAN 2200 MAX 14000 MIN 1090 AC-FT 1597000

NOTE.--No gage-height record Jan. 12, 13.

14339000 ROGUE RIVER AT DODGE BRIDGE, NEAR EAGLE POINT, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: August 1973 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 20.0°C July 27, 28, 1975; minimum, 0.0°C Jan. 6-8, 10, 11, 1974, Jan. 6-9, 1977.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 17.5°C July 7; minimum not determined; minimum observed, 4.5°C Jan. 24.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	13.5	9.5	8.0	5.0	6.5	5.5						
2	13.0	9.0	7.5	5.5	7.0	6.5						
3	13.0	9.5	6.5	5.0	7.5	6.5						
4	13.0	9.5	---	---	6.5	6.5						
5	13.0	9.0	---	---	7.0	6.0						
6	11.5	10.0	---	---	6.5	6.0						
7	12.5	9.5	---	---	6.5	6.0						
8	12.5	9.5	---	---	6.5	6.0						
9	11.5	8.5	---	---	---	---						
10	11.5	8.0	---	---	---	---						
11	11.5	8.5	---	---	---	---						
12	11.0	8.0	---	---	---	---						
13	11.0	8.5	---	---	---	---						
14	9.0	8.5	---	---	---	---						
15	11.5	8.0	---	---	---	---						
16	11.0	8.5	---	---	---	---						
17	9.0	8.0	---	---	---	---						
18	8.5	8.0	---	---	---	---						
19	9.5	7.5	---	---	---	---						
20	9.0	7.5	---	---	---	---						
21	10.0	8.0	---	---	---	---						
22	9.5	7.0	---	---	---	---						
23	9.0	6.5	---	---	---	---						
24	9.0	7.0	---	---	---	---						
25	8.5	7.0	---	---	---	---						
26	8.0	7.5	---	---	---	---						
27	9.0	7.5	---	---	---	---						
28	9.0	6.0	---	---	---	---						
29	8.0	5.5	---	---	---	---						
30	6.5	5.5	---	---	---	---						
31	6.5	5.5	---	---	---	---						
MONTH	13.5	5.5	8.0	5.0	7.5	5.5						

14339000 ROGUE RIVER AT DODGE BRIDGE, NEAR EAGLE POINT, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1			---	---			---	---	---	---		
2			---	---			---	---	---	---		
3			---	---			15.5	---	---	---		
4			---	---			15.5	11.5	---	---		
5			---	---			15.5	12.0	---	---		
6			---	---			17.0	11.5	---	---		
7			---	---			17.5	12.0	---	---		
8			---	---			16.5	12.0	---	---		
9			---	---			15.0	9.5	---	---		
10			---	---			14.5	9.5	---	---		
11			---	---			15.0	9.5	---	---		
12			---	---			15.5	10.0	---	---		
13			---	---			15.0	10.0	---	---		
14			12.0	---			14.5	10.0	---	---		
15			13.5	8.0			15.5	10.0	---	---		
16			13.5	8.5			15.5	9.5	---	---		
17			14.0	8.5			15.0	10.0	---	---		
18			14.0	9.0			15.0	9.5	---	---		
19			14.5	9.0			15.0	9.5	---	---		
20			14.5	9.0			15.5	10.0	---	---		
21			13.5	9.5			15.5	9.5	---	---		
22			11.0	8.5			15.0	9.5	15.5	---		
23			10.5	8.0			15.0	9.0	15.0	10.0		
24			11.0	8.0			14.5	9.0	15.5	10.5		
25			11.0	8.5			15.0	10.0	15.0	10.5		
26			12.0	8.5			15.0	9.5	14.5	9.5		
27			13.0	9.0			15.0	10.0	14.5	9.5		
28			---	---			---	---	14.0	9.0		
29			---	---			---	---	11.5	9.0		
30			---	---			---	---	13.5	8.5		
31			---	---			---	---	14.0	9.5		
MONTH			14.5	8.0			17.5	9.0	15.5	8.5		

14341500 SOUTH FORK LITTLE BUTTE CREEK NEAR LAKECREEK, OR

LOCATION.--Lat 42°24'30", long 122°36'00", in SE¼ sec.29, T.36 S., R.2 E., Jackson County, Hydrologic Unit 17100307, on left bank 0.5 mi (0.8 km) upstream from intake of Rogue River Valley Canal, 1.4 mi (2.3 km) southeast of Lakecreek, and at mile 18.1 (29.1 km).

DRAINAGE AREA.--138 mi^2 (357 km^2).

PERIOD OF RECORD.--April 1921 to current year.

REVISED RECORDS.--WSP 934: 1925(M). WSP 1398: 1922, 1927(M), 1937, 1941-42.

GAGE.--Water-stage recorder. Altitude of gage is 1,725 ft (526 m), by barometer. Supplementary nonrecording gage at site 25 ft (8 m) upstream used Jan. 12 to Sept. 6, 1965. Apr. 15 to June 17, 1921, nonrecording gage, and June 18, 1921, to Sept. 6, 1965, water-stage recorder at site 75 ft (23 m) upstream at datum 4.97 ft (1.515 m) higher.

REMARKS.--Records good below 300 ft^3/s (8.50 m^3/s), fair above. No regulation. Diversions for irrigation above station; also, in December 1958 Dead Indian collection canal began diverting above station from Code Creek and Dead Indian Creek and in December 1959 South Fork Little Butte collection canal began diverting above station from South Fork Little Butte Creek, Daley Creek, and Beaver Dam Creek. These are transbasin diversions to Howard Prairie Reservoir in Klamath River basin, but eventually this water is diverted back to Rogue River basin for irrigation of lands in the Ashland-Medford area and power development enroute.

AVERAGE DISCHARGE.--59 years, 104 ft^3/s (2.945 m^3/s), 75,350 acre-ft/yr (92.9 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,660 ft^3/s (217 m^3/s) Dec. 2, 1962, gage height, 8.35 ft (2.545 m), site and datum then in use; minimum, 2.0 ft^3/s (0.057 m^3/s) Aug. 10, 1931.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft^3/s (14.2 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 13	1230	*1,080	30.6	*6.98	2.128	Mar. 14	0930	523	14.8	6.29	1.917
Jan. 17	0800	523	14.8	6.35	1.935	Apr. 20	1900	572	16.2	6.36	1.939

Minimum, 8.3 ft^3/s (0.24 m^3/s) Oct. 16-18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	27	53	46	62	108	157	157	95	46	19	15
2	11	25	208	46	66	104	148	148	99	44	18	16
3	11	25	260	42	139	139	153	139	108	42	18	16
4	12	32	185	42	104	166	144	130	112	42	18	15
5	10	32	176	58	83	135	157	121	139	42	18	14
6	11	26	131	105	86	121	189	112	148	39	18	15
7	11	23	105	102	76	108	193	99	139	37	18	15
8	12	20	90	102	72	99	211	62	117	35	17	16
9	12	18	77	105	66	90	275	108	104	33	17	14
10	9.5	17	90	109	62	86	264	135	90	33	18	15
11	10	17	71	116	59	108	248	166	86	33	16	14
12	10	16	66	486	59	139	253	157	144	31	16	15
13	11	16	61	744	55	157	297	135	153	28	16	16
14	12	15	56	544	52	366	325	126	130	28	16	16
15	12	14	51	378	52	281	325	112	112	30	16	16
16	8.7	22	46	366	52	211	319	104	95	28	17	15
17	8.7	80	44	474	55	202	308	95	90	30	17	15
18	9.1	74	42	336	117	226	292	86	79	27	17	19
19	15	56	40	259	130	198	314	79	76	26	16	19
20	20	44	38	211	193	207	397	76	69	26	16	21
21	21	36	51	180	175	189	460	72	66	26	16	19
22	15	40	51	157	157	162	418	76	62	25	16	17
23	14	56	44	139	135	162	397	79	66	25	16	17
24	15	305	38	121	121	153	378	95	59	23	16	18
25	40	212	40	108	112	153	348	139	55	23	16	16
26	26	142	40	90	108	153	325	157	62	23	15	16
27	22	102	36	83	108	144	303	139	62	22	16	16
28	42	77	34	83	135	135	231	126	55	22	15	16
29	34	66	32	95	117	139	193	117	50	21	15	16
30	30	58	36	86	---	144	175	108	48	19	16	16
31	32	---	46	66	---	153	---	95	---	19	16	---
TOTAL	519.0	1693	2338	5879	2808	4938	8197	3550	2770	928	515	484
MEAN	16.7	56.4	75.4	190	96.8	159	273	115	92.3	29.9	16.6	16.1
MAX	42	305	260	744	193	366	460	166	153	46	19	21
MIN	8.7	14	32	42	52	86	144	62	48	19	15	14
AC-FT	1030	3360	4640	11660	5570	9790	16260	7040	5490	1840	1020	960

CAL YR 1979 TOTAL 31336.0 MEAN 85.9 MAX 698 MIN 8.7 AC-FT 62150
WTR YR 1980 TOTAL 34619.0 MEAN 94.6 MAX 744 MIN 8.7 AC-FT 68670

14342500 NORTH FORK LITTLE BUTTE CREEK AT FISH LAKE, NEAR LAKECREEK, OR

LOCATION.--Lat 42°22'35", long 122°21'20", in SE¼SW¼ sec.4, T.37 S., R.4 E., Jackson County, Hydrologic Unit 17100307, on right bank 0.5 mi (0.8 km) downstream from Fish Lake dam, 14 mi (23 km) east of Lakecreek, and at mile 15.2 (24.5 km).

DRAINAGE AREA.--20.8 mi^2 (53.9 km^2).

PERIOD OF RECORD.--October 1914 to July 1915, June 1916 to current year. Monthly discharge only November 1916 to May 1917, published in WSP 1318.

REVISED RECORDS.--WSP 654: Drainage area (former site). WSP 1218: 1917(M). WSP 1738: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 4,571.41 ft (1,393.66 m) National Geodetic Vertical Datum of 1929. Oct. 1, 1914, to July 31, 1915, nonrecording gage at site 0.5 mi (0.8 km) upstream at different datum. June 1, 1916, to July 9, 1918, nonrecording gage and July 10, 1918, to Oct. 28, 1932, water-stage recorder at site 0.25 mi (0.40 km) upstream at different datums.

REMARKS.--Records good. Since 1915, Fish Lake (see below) has stored water for irrigation by Medford Irrigation District. Cascade Canal diverts from Fourmile Lake in Klamath River basin and discharges into lava bed 1.0 mi (1.6 km) above Fish Lake; diversion began August 1923. No diversion from creek above station.

AVERAGE DISCHARGE.--64 years (water years 1917-80), 36.1 ft^3/s (1.022 m^3/s), 26,150 acre-ft/yr (32.2 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 940 ft^3/s (26.6 m^3/s) June 5, 1917, computed from rate of change in contents of reservoir after break in dam occurred; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 115 ft^3/s (3.26 m^3/s) July 23, gage height, 1.85 ft (0.564 m); minimum, 7.2 ft^3/s (0.20 m^3/s) Sept. 19, 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	8.4	10	14	18	17	17	24	22	22	95	69
2	10	8.4	11	14	18	17	17	24	22	21	92	67
3	10	8.4	11	14	18	17	17	24	22	30	92	65
4	11	8.4	11	14	17	17	17	24	22	38	90	63
5	11	8.0	11	14	16	17	17	24	24	38	90	60
6	11	8.0	11	14	16	17	17	22	24	36	90	60
7	11	8.0	11	14	16	17	17	22	22	36	90	61
8	11	8.0	11	14	16	17	17	22	22	43	88	61
9	10	8.0	11	15	16	17	18	24	22	50	88	61
10	10	8.0	11	15	16	17	17	24	24	50	87	60
11	11	8.4	12	15	16	18	17	24	24	50	87	60
12	11	8.4	12	16	16	17	18	24	25	54	85	58
13	11	8.4	12	16	16	17	18	24	24	54	85	56
14	10	8.4	12	16	16	18	18	24	24	58	85	56
15	10	8.4	12	16	16	17	18	22	24	65	83	54
16	10	8.8	12	16	16	17	19	22	25	70	81	50
17	10	9.2	13	16	16	17	19	22	25	76	79	50
18	10	9.2	13	16	17	18	19	22	25	69	78	45
19	11	9.2	13	16	16	17	20	22	25	76	72	28
20	10	8.8	13	16	17	18	21	21	25	74	72	8.4
21	10	8.8	13	16	16	17	21	21	25	74	72	8.8
22	9.6	8.8	13	17	16	17	21	21	25	74	74	8.8
23	9.6	9.2	15	17	16	17	21	21	24	88	74	9.2
24	9.2	11	15	17	16	17	21	21	24	85	74	9.2
25	9.6	10	15	17	16	17	21	21	24	81	74	17
26	8.8	10	15	17	16	17	22	21	24	78	72	30
27	9.2	9.6	14	17	17	17	22	21	24	78	72	35
28	8.8	9.6	14	17	17	17	22	21	24	79	72	34
29	8.8	10	14	17	17	17	22	21	22	83	70	34
30	8.8	10	14	17	---	17	22	22	22	90	70	34
31	8.8	---	14	17	---	17	---	22	---	98	70	---
TOTAL	328.2	265.8	389	487	476	531	573	694	710	1918	2503	1312.4
MEAN	10.6	8.86	12.5	15.7	16.4	17.1	19.1	22.4	23.7	61.9	80.7	43.7
MAX	28	11	15	17	18	18	22	24	25	98	95	69
MIN	8.8	8.0	10	14	16	17	17	21	22	21	70	8.4
AC-FT	651	527	772	966	944	1050	1140	1380	1410	3800	4960	2600
(†)	a4250	a4660	a4790	a5070	a5240	a5410	a5600	a5790	5880	a4440	a3180	a3010

CAL YR 1979 TOTAL 10628.0 MEAN 29.1 MAX 87 MIN 8.0 AC-FT 21080
WTR YR 1980 TOTAL 10187.4 MEAN 27.8 MAX 98 MIN 8.0 AC-FT 20210

† Monthend contents, in acre-feet, of Fish Lake.
a Interpolated.

14343000 NORTH FORK LITTLE BUTTE CREEK NEAR LAKECREEK, OR

LOCATION.--Lat 42°24'10", long 122°32'10", in NW¼ sec.36, T.36 S., R.2 E., Jackson County, Hydrologic Unit 17100307, on right bank 1.2 mi (1.9 km) upstream from Wasson Canyon, 4.9 mi (7.9 km) east of Lakecreek, and at mile 4.8 (7.7 km).

DRAINAGE AREA.--43.8 mi² (113.4 km²).

PERIOD OF RECORD.--September 1911 to March 1913, July to September 1917, May 1922 to December 1964, September 1965 to current year. Monthly discharge only for some periods, published in WSP 1318. Published as "above Medford intake, near Lakecreek" 1922-28, 1931-40. Records for April to September 1916, May 1917 to September 1919, April to September 1921, and October 1923 to September 1924 at site 3 mi (5 km) upstream not equivalent owing to diversion and difference in drainage areas.

REVISED RECORDS.--WSP 1518: 1912-13. WSP 1738: Drainage area (former site).

GAGE.--Water-stage recorder. Concrete control since Oct. 9, 1968. Altitude of gage is 2,160 ft (658 m), from topographic map. Sept. 10, 1911, to Mar. 31, 1913, and July 1 to Sept. 30, 1917, nonrecording gage at site 1,000 ft (305 m) dowstream at different datums. May 26, 1922, to Dec. 31, 1964, water-stage recorder at site 1,000 ft (305 m) downstream at datum 2,125.01 ft (664.703 m) above mean sea level.

REMARKS.--Records good. Flow partly regulated since 1915 by Fish Lake (published with station 14342500). Diversions for irrigation above station; some water diverted into Fish Lake from Fourmile Lake, in Klamath River basin, since 1923.

AVERAGE DISCHARGE.--58 years (water years 1912, 1923-64, 1966-80), 71.5 ft³/s (2.025 m³/s), 51,800 acre-ft/yr (63.9 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,750 ft³/s (49.6 m³/s) Dec. 22, 1964, gage height, 6.06 ft (1.847 m), present site and datum; minimum, 11 ft³/s (0.31 m³/s) Oct. 29 to Nov. 8, 1931.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 178 ft³/s (5.04 m³/s) Jan. 13, gage height, 3.56 ft (1.085 m); minimum recorded, 28 ft³/s (0.79 m³/s) Sept. 20-22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	35	41	43	45	48	60	61	59	50	124	91
2	34	34	59	42	45	48	59	60	59	49	122	89
3	34	35	59	42	57	56	57	59	59	56	122	86
4	34	38	56	41	49	55	56	57	59	64	119	84
5	34	37	54	44	49	52	57	57	60	64	119	80
6	34	36	50	44	49	51	61	56	59	64	119	80
7	34	36	48	43	48	50	63	56	57	65	117	80
8	33	35	47	42	47	49	67	56	56	70	117	80
9	33	36	45	43	47	48	78	61	55	77	115	78
10	33	36	48	44	45	48	74	72	55	77	113	78
11	33	34	44	43	45	54	70	84	55	80	113	78
12	33	34	43	74	45	52	67	72	70	86	111	78
13	33	34	43	109	45	57	67	68	64	84	111	77
14	35	34	42	94	44	96	67	65	61	88	109	75
15	34	33	42	74	44	77	65	64	60	96	109	74
16	33	37	41	78	44	68	64	61	59	101	108	67
17	34	51	41	92	44	70	63	60	57	108	106	67
18	35	49	41	74	47	77	61	60	56	99	102	70
19	38	43	40	65	48	72	60	59	56	108	97	57
20	38	40	40	60	52	72	81	57	56	108	96	32
21	36	37	47	57	51	70	91	57	55	106	96	29
22	34	41	47	55	51	64	83	57	55	106	96	28
23	33	47	43	52	50	63	78	57	54	115	94	29
24	33	99	43	51	48	61	72	65	54	120	94	30
25	42	64	42	50	48	60	71	77	54	115	94	39
26	34	54	41	49	48	61	68	71	52	111	94	52
27	37	48	41	48	47	60	67	65	51	111	94	54
28	39	44	40	47	50	57	64	63	51	109	94	54
29	35	42	40	47	48	57	63	61	51	115	91	52
30	37	41	42	45	---	57	61	60	51	119	89	52
31	37	---	43	45	---	59	---	60	---	126	91	---
TOTAL	1101	1264	1393	1737	1380	1869	2015	1938	1700	2847	3276	1920
MEAN	35.5	42.1	44.9	56.0	47.6	60.3	67.2	62.5	56.7	91.8	106	64.0
MAX	55	99	59	109	57	96	91	84	70	126	124	91
MIN	33	33	40	41	44	48	56	56	51	49	89	28
AC-FT	2180	2510	2760	3450	2740	3710	4000	3840	3370	5650	6500	3810

CAL YR 1979 TOTAL 23906 MEAN 65.5 MAX 173 MIN 33 AC-FT 47420
WTR YR 1980 TOTAL 22440 MEAN 61.3 MAX 126 MIN 28 AC-FT 44510

14350000 EMIGRANT CREEK NEAR ASHLAND, OR

LOCATION.--Lat 43°09'50", long 122°36'15", in SE¼NE¼ sec.20, T.39 S., R.2 E., Jackson County, Hydrologic Unit 17100309, on left bank 0.1 mi (0.2 km) downstream from Emigrant Dam, 6 mi (10 km) southeast of Ashland, and at mile 29.2 (47.0 km).

DRAINAGE AREA.--64.3 mi² (166.5 km²).

PERIOD OF RECORD.--January to June 1920, October to July 1922, February 1923 to May 1924 (incomplete), October 1924 to November 1925, February to August 1926, October 1926 to September 1928, April 1929 to September 1930, April 1931 to October 1932 (incomplete), April 1933 to September 1935, April 1936 to September 1939 (incomplete), April 1940 to September 1947, January 1948 to October 1952 (incomplete), December 1952 to current year. Monthly discharge only for some periods, published in WSP 1318.

REVISED RECORDS.--WSP 1448: 1921, 1927-28, 1937, 1953(M).

GAGE.--Water-stage recorder and artificial control. Datum of gage is 2,042.80 ft (622.645 m) National Geodetic Vertical Datum of 1929 (Water and Power Resources Service bench mark). Prior to Oct. 1, 1926, water-stage recorder or nonrecording gage at several nearby sites at various datums. Oct. 1, 1926, to Feb. 24, 1959, water-stage recorder near present site at datum 10.93 ft (3.331 m) higher. Feb. 25, 1959, to May 7, 1961, water-stage recorder at site 1.0 mi (1.6 km) downstream at different datum.

REMARKS.--Records good except those below 10 ft³/s (0.28 m³/s), which are fair. Flow regulated since 1924 by Emigrant Lake (see below). Several diversions above station for irrigation, the principal diversion canals are Ashland lateral and East lateral (see below). From June 1923 to August 1960, water diverted by Keene Creek Canal from Klamath River basin into Emigrant Creek above station. Beginning May 1960, water from Klamath River basin diverted to Emigrant Creek above station via Green Springs powerplant diversion.

AVERAGE DISCHARGE.--40 years (water years 1925, 1927-30, 1934-35, 1941-47, 1954-80), 31.4 ft³/s (0.889 m³/s), 22,750 acre-ft/yr (28.1 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,260 ft³/s (149 m³/s) Feb. 20, 1927, by computation of peak flow over dam; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 203 ft³/s (5.75 m³/s) Apr. 24-26, gage height, 2.21 ft (0.674 m); no flow Nov. 21, 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	.10	.20	.10	.10	1.6	190	60	.50	22	73	45
2	.10	.10	.10	.10	.10	1.6	143	55	.50	38	73	41
3	.10	.10	.10	.10	.20	1.6	105	42	.40	48	73	43
4	.10	.10	.10	.10	.70	1.6	105	36	.40	48	72	46
5	.10	.10	.10	.10	1.6	1.6	49	14	.40	48	72	46
6	.10	.10	.20	.10	1.6	1.6	116	1.6	.40	47	72	46
7	.10	.10	.20	.10	1.6	1.6	143	1.6	.30	47	72	46
8	.10	.10	.20	.10	1.6	1.6	109	1.6	.50	47	72	45
9	.10	.10	.20	.10	1.6	1.6	109	1.6	.70	47	72	45
10	.10	.10	.20	.10	1.6	1.6	109	1.6	.70	47	72	45
11	.10	.10	.20	.10	1.6	1.6	109	1.6	.70	47	72	45
12	.10	.10	.20	.20	1.6	1.6	109	2.0	.40	47	72	45
13	.10	.10	.20	.20	1.6	1.6	110	2.0	.40	47	72	41
14	.10	.10	.20	.10	1.6	1.6	110	2.0	.40	47	72	39
15	.10	.10	.20	.10	1.6	1.6	110	2.0	.40	47	73	39
16	.10	.10	.20	.20	1.6	1.6	110	2.0	.50	45	73	37
17	.10	.10	.10	.50	1.6	.90	110	2.0	.50	45	73	35
18	.10	.10	.10	.70	1.6	61	112	2.0	.50	45	66	35
19	.10	.10	.10	.50	1.6	106	88	2.0	.50	45	60	35
20	.10	.10	.10	.70	1.6	106	94	8.6	.50	45	58	26
21	.10	.00	.10	108	1.6	106	143	14	.50	47	58	21
22	.10	.10	.10	183	1.6	106	143	14	.50	50	58	21
23	.10	.10	.10	182	1.6	106	145	13	.50	50	58	19
24	.10	.10	.10	182	1.6	105	175	6.8	3.5	55	58	17
25	.10	.10	.10	182	1.6	105	201	1.2	7.4	61	58	20
26	.10	.10	.10	182	1.6	106	142	1.2	11	60	54	27
27	.10	.10	.10	182	1.6	142	112	.90	11	60	50	27
28	.10	.00	.10	78	1.6	.40	113	.70	11	60	50	26
29	.10	.10	.10	.20	1.6	.40	115	.50	11	60	50	25
30	.10	.20	.10	.20	---	.40	85	.50	14	67	50	25
31	.10	---	.10	.20	---	109	---	.50	---	71	49	---
TOTAL	3.10	2.90	4.30	1283.90	41.10	1185.70	3614	294.50	80.00	1540	2007	1053
MEAN	.10	.097	.14	41.4	1.42	38.2	120	9.50	2.67	49.7	64.7	35.1
MAX	.10	.20	.20	183	1.6	142	201	60	14	71	73	46
MIN	.10	.00	.10	.10	.10	.40	49	.50	.30	22	49	17
AC-FT	6.1	5.8	8.5	2550	82	2350	7170	584	159	3050	3980	2090
(†)	a9210	11450	16230	26220	33820	39000	38920	37300	37530	28140	a17790	a11380
(‡)	0	0	0	0	0	178	1490	5290	4600	8500	7810	7260

CAL YR 1979 TOTAL 8974.80 MEAN 24.6 MAX 219 MIN .00 AC-FT 17800
WTR YR 1980 TOTAL 11109.50 MEAN 30.4 MAX 201 MIN .00 AC-FT 22040

† Monthend contents, in acre-feet, of Emigrant Lake.
‡ Diversion, in acre-feet, by East Lateral.
a Interpolated.

14353000 WEST FORK ASHLAND CREEK NEAR ASHLAND, OR

LOCATION.--Lat 42°08'55", long 122°42'55", near line between NW¼ and SW¼ sec.38, T.39 S., R.1 E., Jackson County, Hydrologic Unit 17100308, in Rogue River National Forest, on left bank 0.3 mi (0.5 km) above city diversion, 2.5 mi (4.0 km) south of Ashland, and at mile 0.4 (0.6 km).

DRAINAGE AREA.--10.5 mi^2 (27.2 km^2), at diversion dam 0.3 mi (0.5 km) downstream.

PERIOD OF RECORD.--September 1924 to January 1933, water years 1954-60, 1963, annual maximum; December 1974 to current year. Monthly discharge only for some periods published in WSP 1318.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 2,962.75 ft (903.046 m) National Geodetic Vertical Datum of 1929. Sept. 10, 1924, to Jan. 31, 1933, water-stage recorder at site about 0.2 mi (0.3 km) upstream at different datum. Oct. 14, 1953, to Sept. 30, 1963, crest-stage gage at diversion dam 0.3 mi (0.5 km) downstream at different datum.

REMARKS.--Records good. No regulation or diversion above station.

AVERAGE DISCHARGE.--13 years (water years 1925-32, 1976-80), 8.54 ft^3/s (0.242 m^3/s), 11.05 in/yr (281 mm/yr), 6,190 acre-ft/yr (7.63 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 330 ft^3/s (9.35 m^3/s) Dec. 2, 1962, gage height, 15.51 ft (4.727 m), site and datum then in use, from rating curve defined by computation of peak flow over dam; minimum, 1.3 ft^3/s (0.037 m^3/s) Aug. 29, 1931, Sept. 8, 9, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 15, 1974, is the highest since at least 1900. Discharge, 4,780 ft^3/s (135 m^3/s) by slope-area measurement of peak flow, gage height, 9.5 ft (2.90 m), from floodmarks. Peak believed to be affected by release from debris dams breaking upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 50 ft^3/s (1.42 m^3/s) and maximum discharge, 72 ft^3/s (2.04 m^3/s) Jan. 13, gage height, 2.70 ft (0.823 m); minimum, 1.8 ft^3/s (0.051 m^3/s) Oct. 9, 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	6.2	7.4	8.4	7.0	18	7.5	20	19	15	5.7	3.6
2	2.2	5.6	13	7.4	8.0	16	7.2	20	18	15	5.7	3.6
3	2.2	6.0	12	6.7	13	17	7.2	21	19	14	5.5	3.6
4	2.2	6.0	11	6.7	8.8	16	7.5	22	20	14	5.3	3.4
5	2.2	6.2	11	14	8.4	15	9.4	22	20	14	5.2	3.3
6	2.2	5.8	8.8	16	8.0	14	9.0	22	20	13	5.2	3.3
7	2.1	5.4	7.7	13	7.0	13	8.7	22	20	13	5.0	3.3
8	2.2	5.2	7.4	11	6.7	12	9.8	22	19	12	5.0	3.3
9	2.0	5.1	6.5	10	6.5	12	11	22	20	12	5.0	3.2
10	2.0	4.9	6.7	8.8	6.5	12	11	21	19	12	5.0	3.2
11	2.0	4.8	5.8	10	6.2	12	11	21	20	11	5.0	3.3
12	2.0	4.6	5.8	47	6.0	11	12	21	21	11	4.9	3.3
13	2.3	4.6	5.6	61	6.0	12	14	21	22	11	4.9	3.8
14	3.7	4.5	5.4	61	5.8	13	14	20	21	11	4.9	3.7
15	3.7	4.5	5.2	42	5.8	12	14	20	20	9.8	4.9	3.7
16	3.4	6.0	5.1	33	5.8	12	15	19	20	9.4	4.7	3.5
17	3.2	8.8	4.9	29	12	12	16	19	20	9.0	4.5	3.4
18	3.8	6.7	4.8	23	28	12	16	19	20	8.7	4.5	5.3
19	4.8	6.2	4.8	20	27	11	16	20	19	8.3	4.4	4.7
20	5.6	5.8	4.8	18	27	12	20	20	19	8.3	4.1	5.9
21	4.6	5.8	5.1	16	25	11	19	21	19	8.0	4.0	4.2
22	6.0	6.5	4.8	14	24	11	19	21	19	7.5	4.1	3.8
23	5.4	6.5	4.5	13	22	11	20	20	18	7.2	4.1	3.6
24	10	15	4.9	12	21	11	19	20	18	7.2	4.0	3.4
25	20	12	4.8	10	21	11	19	20	18	7.0	4.0	3.2
26	7.0	9.2	4.5	9.6	21	11	20	20	17	6.8	3.8	3.0
27	7.0	7.7	4.5	8.4	24	10	20	20	16	6.5	3.8	2.9
28	6.7	7.4	4.5	7.8	21	10	21	20	16	6.3	3.7	2.9
29	6.0	7.7	4.5	7.4	19	10	21	20	16	6.1	3.6	2.8
30	7.7	7.4	5.1	7.0	---	9.8	20	20	16	6.1	3.6	2.8
31	7.4	---	9.6	6.8	---	9.0	---	19	---	5.9	3.7	---
TOTAL	143.9	198.1	200.5	558.0	407.5	378.8	434.3	635	569	306.1	141.8	107.0
MEAN	4.64	6.60	6.47	18.0	14.1	12.2	14.5	20.5	19.0	9.87	4.57	3.57
MAX	20	15	13	61	28	18	21	22	22	15	5.7	5.9
MIN	2.0	4.5	4.5	6.7	5.8	9.0	7.2	19	16	5.9	3.6	2.8
CFSM	.44	.63	.62	1.71	1.34	1.16	1.38	1.95	1.81	.94	.44	.34
IN.	.51	.70	.71	1.98	1.44	1.34	1.54	2.25	2.02	1.08	.50	.38
AC-FT	285	393	398	1110	808	751	861	1260	1130	607	281	212

CAL YR 1979 TOTAL 3385.4 MEAN 9.28 MAX 35 MIN 2.0 CFSM .88 IN 11.99 AC-FT 6710
WTR YR 1980 TOTAL 4080.0 MEAN 11.1 MAX 61 MIN 2.0 CFSM 1.06 IN 14.45 AC-FT 8090

14353500 EAST FORK ASHLAND CREEK NEAR ASHLAND, OR

LOCATION.--Lat 42°09'10", long 122°42'30", near line between NE¼ and NW¼ sec.28, T.39 S., R.1 E., Jackson County, Hydrologic Unit 17100308, Rogue River National Forest, on left bank 0.1 mi (0.2 km) above city diversion dam, 2.5 mi (4.0 km) south of Ashland, and at mile 0.2 (0.3 km).

DRAINAGE AREA.--8.14 mi² (21.1 km²), at diversion dam 0.1 mi (0.2 km) downstream.

PERIOD OF RECORD.--September 1924 to January 1933, water years 1954-60, 1963, annual maximum, December 1974 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 2,903.70 ft (885.048 m) National Geodetic Vertical Datum of 1929. Sept. 10, 1924, to Jan. 31, 1933, water-stage recorder at site about 200 ft (61.0 m) downstream at different datum. Oct. 19, 1953, to Sept. 30, 1963, crest-stage gage at diversion dam 0.1 mi (0.2 km) downstream at different datum.

REMARKS.--Records good. No regulation or diversion.

AVERAGE DISCHARGE.--13 years (water years 1925-32, 1976-80), 8.91 ft³/s (0.252 m³/s), 14.86 in/yr (377 mm/yr), 6,460 acre-ft/yr (7.97 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 335 ft³/s (9.49 m³/s) Dec. 2, 1962, gage height, 5.42 ft (1.652 m), site and datum then in use, from rating curve defined by computations of peak flow over dam; minimum, 0.47 ft³/s (0.013 m³/s) Mar. 14, 1977, result of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 15, 1974, is the highest since at least 1925. Discharge, 5,630 ft³/s (159 m³/s) by slope-area measurement of peak flow, gage height, 10.2 ft (3.11 m) from floodmarks. Peak believed to be affected by release from debris dams breaking upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 40 ft³/s (1.13 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 25	0300	45	1.27	1.99	0.607	Jan. 30	1130	ice jam		*3.41	1.039
Jan. 13	0930	*86	2.44	2.26	0.689						

Minimum, 2.4 ft³/s (0.068 m³/s) Oct. 9, 10, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	4.9	5.8	7.5	9.0	19	8.2	17	18	17	7.5	3.7
2	2.7	4.9	17	7.0	11	18	8.2	17	18	17	7.5	3.7
3	2.7	5.8	15	6.7	17	18	7.8	18	19	17	7.5	3.7
4	2.7	5.5	12	6.7	13	17	7.8	19	20	16	7.2	3.6
5	2.8	6.2	11	12	12	16	8.5	20	20	16	7.5	3.5
6	2.7	5.8	9.6	12	12	15	8.2	20	21	15	7.5	3.5
7	2.8	5.1	8.8	9.6	12	14	7.8	21	21	15	7.0	3.6
8	2.8	4.9	8.5	8.8	12	14	8.5	21	20	14	6.5	3.5
9	2.8	4.5	8.2	8.5	11	14	9.6	22	19	14	6.0	3.4
10	2.6	4.5	7.5	7.8	10	13	8.8	21	19	13	5.8	3.2
11	2.7	4.3	6.7	11	10	13	8.8	21	20	13	6.0	3.2
12	2.4	4.2	6.7	64	10	12	9.6	21	21	13	5.8	3.2
13	2.7	4.2	6.5	71	10	12	11	21	21	12	5.5	3.7
14	4.0	3.8	6.2	70	9.6	14	12	20	21	12	5.8	3.7
15	4.0	3.8	6.0	45	9.6	13	11	19	21	11	5.3	3.5
16	2.9	6.5	6.0	36	9.6	12	12	19	21	11	5.1	3.4
17	2.9	7.5	5.8	34	15	12	12	19	21	11	4.9	3.2
18	4.0	5.8	5.5	27	26	11	12	19	21	10	5.1	4.7
19	5.3	5.3	5.5	23	26	12	13	20	21	10	4.9	4.2
20	5.1	4.9	5.5	21	24	12	19	21	21	10	4.7	4.5
21	4.2	4.9	6.0	18	22	11	17	21	21	9.6	4.9	4.2
22	6.0	5.3	5.3	16	21	10	17	22	22	9.2	4.9	3.8
23	5.5	5.3	4.7	16	18	10	18	22	22	9.2	4.7	3.7
24	8.5	12	6.2	15	16	9.2	17	22	21	9.2	4.5	3.5
25	18	8.8	6.0	14	17	8.8	17	22	20	8.8	4.3	3.5
26	5.8	7.2	5.5	13	18	8.8	17	21	19	8.5	4.3	3.4
27	5.5	6.5	5.5	12	21	8.8	17	20	19	8.2	4.2	3.2
28	5.5	6.2	5.5	11	23	8.5	18	20	19	8.2	4.0	3.1
29	4.9	6.2	5.5	10	21	8.5	18	20	18	8.5	3.7	3.1
30	6.2	5.8	6.5	9.7	---	8.5	17	19	17	8.8	3.7	3.1
31	5.5	---	8.2	9.3	---	8.5	---	18	---	7.8	3.7	---
TOTAL	139.0	170.6	228.7	632.6	445.8	381.6	376.8	623	602	363.0	170.0	107.3
MEAN	4.48	5.69	7.38	20.4	15.4	12.3	12.6	20.1	20.1	11.7	5.48	3.58
MAX	18	12	17	71	26	19	19	22	22	17	7.5	4.7
MIN	2.4	3.8	4.7	6.7	9.0	8.5	7.8	17	17	7.8	3.7	3.1
CFSM	.55	.70	.91	2.51	1.89	1.51	1.55	2.47	2.47	1.44	.67	.44
IN.	.64	.78	1.05	2.89	2.04	1.74	1.72	2.85	2.75	1.66	.78	.49
AC-FT	276	338	454	1250	884	757	747	1240	1190	720	337	213

CAL YR 1979 TOTAL 3594.4 MEAN 9.85 MAX 36 MIN 2.4 CFSM 1.21 IN 16.42 AC-FT 7130
WTR YR 1980 TOTAL 4240.4 MEAN 11.6 MAX 71 MIN 2.4 CFSM 1.43 IN 19.38 AC-FT 8410

14357500 BEAR CREEK AT MEDFORD, OR

LOCATION.--Lat 42°19'40", long 122°52'10", in NW¼ sec.30, T.37 S., R.1 W., Jackson County, Hydrologic Unit 17100308, on left bank 40 ft (12 m) upstream from Main Street Bridge in Medford and at mile 9.91 (15.95 km).

DRAINAGE AREA.--289 mi^2 (749 km^2).

PERIOD OF RECORD.--March 1915 to June 1920 (no low-flow records), October 1920 to current year. Monthly discharge only for some periods, published in WSP 1318.

REVISED RECORDS.--WSP 1044: 1944. WSP 1448: 1916, 1917(M), 1918-20, 1922, 1924, 1927(M), 1928, 1930. WSP 1568: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,343.98 ft (409.645 m) National Geodetic Vertical Datum of 1929. See WSP 1738 for history of changes prior to Dec. 31, 1947.

REMARKS.--Records good. Flow partly regulated since 1924 by Emigrant Lake (published with station 14350000). Numerous diversions for irrigation above station.

AVERAGE DISCHARGE.--60 years (water years 1921-80), 115 ft^3/s (3.257 m^3/s), 83,320 acre-ft/yr (103 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,500 ft^3/s (411 m^3/s) Dec. 2, 1962, gage height, 8.04 ft (2.451 m); maximum gage height, about 11.0 ft (3.35 m) Feb. 20, 1927, from floodmarks, present datum, site then in use; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,140 ft^3/s (60.6 m^3/s) Jan. 13, gage height, 3.45 ft (1.052 m); minimum, 4.6 ft^3/s (0.13 m^3/s) Oct. 10, 12, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	42	49	54	105	141	311	155	63	30	47	69
2	18	36	267	47	110	133	275	144	94	27	56	63
3	15	39	223	41	303	192	206	131	176	32	59	58
4	10	44	195	38	182	216	199	115	158	44	58	56
5	11	42	164	56	150	158	192	96	133	51	47	56
6	12	36	99	90	150	141	216	90	110	61	46	46
7	12	30	79	63	125	128	303	75	99	65	49	47
8	11	29	69	54	118	123	271	67	88	47	52	61
9	10	28	61	52	113	115	283	83	77	54	49	54
10	9.0	28	61	61	108	113	263	115	67	56	56	56
11	7.8	25	54	58	103	118	248	141	63	54	56	58
12	7.8	25	52	546	101	131	241	139	108	51	44	71
13	11	25	58	1330	99	144	234	113	131	58	51	73
14	27	24	54	928	96	353	234	108	131	52	54	81
15	23	23	52	480	94	267	230	101	103	47	61	103
16	16	35	51	465	94	202	206	94	85	41	65	90
17	14	105	47	606	103	192	195	71	90	33	75	81
18	19	65	38	339	241	209	192	63	88	35	79	96
19	33	59	35	255	206	275	179	56	79	42	65	94
20	58	42	35	220	271	279	295	36	73	49	65	101
21	44	38	52	237	244	271	470	36	67	58	58	88
22	30	101	49	353	237	259	400	41	56	36	58	85
23	30	115	44	339	188	255	385	73	69	35	52	79
24	35	357	46	331	164	248	362	94	63	35	54	67
25	141	188	44	319	147	251	353	94	54	42	56	56
26	71	152	39	311	144	251	307	105	51	41	61	56
27	71	96	36	303	147	271	234	77	56	51	63	59
28	63	77	35	251	185	188	227	59	47	54	56	73
29	47	69	35	108	155	147	216	52	46	44	54	73
30	65	52	49	103	---	141	195	44	38	49	52	69
31	54	---	73	105	---	185	---	51	---	49	56	---
TOTAL	987.6	2027	2245	8543	4483	6097	7922	2719	2563	1423	1754	2119
MEAN	31.9	67.6	72.4	276	155	197	264	87.7	85.4	45.9	56.6	70.6
MAX	141	357	267	1330	303	353	470	155	176	65	79	103
MIN	7.8	23	35	38	94	113	179	36	38	27	44	46
AC-FT	1960	4020	4450	16950	8890	12090	15710	5390	5080	2820	3480	4200

CAL YR 1979	TOTAL	33100.6	MEAN	90.7	MAX	570	MIN	7.8	AC-FT	65660
WTR YR 1980	TOTAL	42882.6	MEAN	117	MAX	1330	MIN	7.8	AC-FT	85060

14359000 ROGUE RIVER AT RAYGOLD, NEAR CENTRAL POINT, OR

LOCATION.--Lat 42°26'15", long 122°59'10", in SW¼ sec.18, T.36 S., R.2 W., Jackson County, Hydrologic Unit 17100308, on right bank at Raygold, 0.1 mi (0.2 km) downstream from Gold Ray Dam, 1.0 mi (1.6 km) downstream from Bear Creek, 5.6 mi (9.0 km) northwest of Central Point, and at mile 125.8 (202.4 km).

DRAINAGE AREA.--2,053 mi² (5,317 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1905 to current year. Prior to October 1921, published as "near Tolo."

REVISED RECORDS.--WSP 1248: 1906, 1914(M), 1915. WSP 1398: 1910(M). WSP 1738: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,121.78 ft (341.919 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 19, 1914, nonrecording gage and Sept. 19, 1914, to Sept. 30, 1956, water-stage recorder, at site 300 ft (91 m) upstream at same datum.

REMARKS.--Water-discharge records excellent. Flow regulated since February 1977 by Lost Creek Lake (see station 14335040). Slight regulation by Fish Lake (published with station 14342500) and Emigrant Lake (published with station 14350000). Many diversions for irrigation above station.

AVERAGE DISCHARGE.--75 years, 2,962 ft³/s (83.88 m³/s), 2,146,000 acre-ft/yr (2.65 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 131,000 ft³/s (3,710 m³/s) Dec. 23, 1964, gage height, 23.43 ft (7.141 m), from rating curve extended above 63,000 ft³/s (1,780 m³/s) on basis of slope-area measurement of 113,000 ft³/s (3,200 m³/s); minimum not determined; minimum daily, 616 ft³/s (17.4 m³/s) Sept. 6, 1931.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in December 1861 reached a stage of about 32 ft (10 m), discharge not determined, and flood in February 1890 reached a stage of about 27.5 ft (8.38 m), discharge not determined, from information by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 29,000 ft³/s (821 m³/s) Jan. 13, gage height, 10.65 ft (3.246 m); minimum, 1,140 ft³/s (32.3 m³/s) Oct. 10, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1510	1770	2780	4270	1660	2060	2420	3150	1880	2040	2230	1700
2	1290	1590	5530	3110	1560	1940	2310	3040	1920	2020	2230	1690
3	1190	1520	9270	2650	2890	2270	2150	3000	2120	2020	2260	1680
4	1160	1540	6970	2410	2380	3270	2080	2940	2110	2080	2260	1660
5	1160	1940	7180	2420	1990	2570	2030	2870	2170	2080	2240	1670
6	1160	2840	5080	2690	2060	2700	2340	2860	2120	2090	2230	1660
7	1170	2330	4290	2480	1830	2490	2690	2800	2090	2090	2240	1670
8	1170	1680	3790	2300	1730	2330	2730	2760	2020	2050	2240	1570
9	1170	1450	3130	2240	1650	2220	3410	2810	1970	2030	2260	1330
10	1160	1420	2990	2540	1600	2140	3550	2870	1890	2040	2240	1310
11	1170	1380	2940	3130	1550	2150	3600	2980	2040	2030	2260	1310
12	1170	1360	2710	14400	1510	2200	3120	2920	2350	2030	2230	1340
13	1170	1350	2620	19100	1480	2520	3030	2640	2440	2030	2240	1350
14	1290	1350	2540	15200	1450	6660	3040	2120	2370	2030	2240	1360
15	1370	1330	2200	12500	1440	5990	3140	1900	2310	2020	2280	1380
16	1280	1390	2190	15300	1420	4800	3030	2030	2240	2060	2290	1360
17	1260	2210	2120	15900	1420	4190	3040	2260	2240	2060	2310	1340
18	1290	2300	2090	12200	1760	4190	3230	2220	2280	2150	2320	1390
19	1490	2220	2060	8060	2380	3850	3400	2170	2230	2210	2320	1410
20	1790	2060	2040	6320	3070	3720	3840	2060	2210	2210	2240	1400
21	1860	1880	2690	5210	2680	3720	5840	2090	2170	2200	2030	1390
22	1530	2260	2980	4540	2560	3410	5470	2200	2150	2160	1770	1380
23	1490	4250	2660	4310	2490	3250	4680	2430	2200	2150	1610	1360
24	1470	7420	2780	4150	2210	3000	4100	2600	2180	2180	1600	1350
25	2560	5000	2770	4010	2030	2560	3920	2790	2200	2230	1610	1330
26	1990	5180	2470	3530	1960	2510	3780	3000	2170	2230	1640	1320
27	1670	4120	2170	3120	1900	2520	3600	2660	2160	2230	1660	1320
28	1740	3720	2090	2680	2700	2350	3500	2230	2110	2230	1680	1330
29	1580	3500	2050	1830	2310	2220	3400	1990	2090	2220	1690	1330
30	1620	3040	2120	1780	---	2200	3300	1940	2090	2210	1690	1330
31	1730	---	4820	1810	---	2200	---	1880	---	2240	1680	---
TOTAL	44660	75400	104120	186190	57670	94200	99770	78210	64520	65650	63820	43020
MEAN	1441	2513	3359	6006	1989	3039	3326	2523	2151	2118	2059	1434
MAX	2560	7420	9270	19100	3070	6660	5840	3150	2440	2240	2320	1700
MIN	1160	1330	2040	1780	1420	1940	2030	1880	1880	2020	1600	1310
AC-FT	88580	149600	206500	369300	114400	186800	197900	155100	128000	130200	126600	85330

CAL YR 1979 TOTAL 940610 MEAN 2577 MAX 10800 MIN 1160 AC-FT 1866000
WTR YR 1980 TOTAL 977230 MEAN 2670 MAX 19100 MIN 1160 AC-FT 1938000

14359000 ROGUE RIVER AT RAYGOLD, NEAR CENTRAL POINT, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: August 1973 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 22.0°C July 25, 26, 1976; minimum, 0.0°C Jan. 7, 1974.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 18.5°C July 7, 8; minimum, 1.0°C Jan. 30.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	14.5	13.0	10.5	8.5	6.5	5.5	7.5	6.5	5.5	4.0	---	---
2	14.5	13.0	9.5	8.5	8.0	6.5	7.0	6.0	6.0	5.5	---	---
3	14.5	13.0	9.0	8.5	8.0	7.0	6.5	6.0	7.0	6.0	---	---
4	14.5	13.5	9.0	9.0	7.5	6.5	6.5	6.0	6.5	6.0	---	---
5	14.5	13.0	10.0	8.5	7.0	6.5	7.0	6.5	6.0	5.5	---	---
6	14.5	13.5	10.0	8.5	7.0	6.5	7.0	6.5	6.5	5.5	---	---
7	14.0	12.5	9.5	8.5	6.5	6.5	6.5	6.0	6.0	4.5	---	---
8	14.0	13.0	9.5	7.5	6.5	6.0	6.5	5.0	5.5	4.5	---	---
9	14.0	12.0	8.5	7.0	6.5	6.0	6.0	5.5	6.0	4.5	---	---
10	13.0	12.0	8.0	7.0	6.5	6.0	5.5	4.0	7.0	5.5	---	---
11	13.0	12.0	7.0	6.5	5.5	4.0	5.5	4.0	6.5	5.0	---	---
12	13.0	12.0	6.5	6.0	5.5	4.5	7.5	5.5	5.5	4.5	---	---
13	13.0	12.0	6.5	6.0	5.0	4.0	8.0	7.5	6.0	4.5	---	---
14	13.0	11.5	6.5	6.0	5.0	4.0	8.0	7.5	6.0	5.0	8.0	---
15	13.0	11.0	6.5	6.0	4.5	4.0	7.0	6.0	7.0	5.5	7.0	5.0
16	13.0	12.0	8.0	7.0	4.5	4.0	6.5	6.0	7.0	6.5	7.5	4.5
17	12.5	12.0	9.0	8.0	6.0	4.0	6.5	5.5	7.5	6.5	7.0	5.5
18	12.5	10.5	9.0	8.0	6.5	5.5	5.5	---	7.5	6.5	---	---
19	10.5	10.0	7.5	6.5	7.5	6.5	---	---	---	6.5	---	---
20	10.5	9.5	6.5	5.5	7.0	6.5	---	---	---	---	---	---
21	11.0	9.0	6.0	5.0	6.5	6.0	---	---	---	---	---	---
22	10.5	9.5	7.0	6.0	6.0	5.0	---	---	---	---	---	---
23	10.5	9.0	6.5	5.5	5.0	4.5	---	---	---	---	---	---
24	10.5	10.0	7.5	6.0	5.5	5.0	6.0	---	---	---	---	---
25	11.5	10.5	7.5	6.0	5.5	5.0	5.5	4.5	---	---	---	---
26	11.5	10.0	6.5	5.5	6.0	5.0	5.0	3.5	---	---	---	---
27	11.0	10.0	6.0	5.0	5.0	4.0	5.0	4.0	---	---	---	---
28	10.5	9.5	6.5	5.0	4.5	3.5	4.0	2.5	---	---	---	---
29	9.5	8.0	6.5	5.5	6.0	4.5	3.5	1.5	---	---	---	---
30	9.0	8.5	7.0	5.5	6.5	5.5	2.5	1.0	---	---	---	---
31	10.5	9.0	---	---	7.0	6.0	4.0	2.5	---	---	---	---
MONTH	14.5	8.0	10.5	5.0	8.0	3.5	8.0	1.0	7.5	4.0	8.0	4.5

14359000 ROGUE RIVER AT RAYGOLD, NEAR CENTRAL POINT, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	APRIL MAX	APRIL MIN	MAY MAX	MAY MIN	JUNE MAX	JUNE MIN	JULY MAX	JULY MIN	AUGUST MAX	AUGUST MIN	SEPTEMBER MAX	SEPTEMBER MIN
1			---	---	16.0	13.0	17.0	13.0	16.5	12.5	15.5	13.0
2			---	---	14.5	11.5	17.5	15.0	17.0	12.0	15.5	13.0
3			---	---	14.5	11.0	17.5	14.5	16.5	12.0	15.5	12.5
4			---	---	15.0	11.5	17.0	13.5	16.5	12.0	16.0	13.0
5			---	---	14.5	12.0	17.5	14.0	16.5	12.0	16.0	13.5
6			---	---	14.0	12.0	18.0	14.0	16.0	11.5	16.0	14.0
7			---	---	16.0	12.0	18.5	15.0	16.5	11.5	16.0	13.5
8			---	---	17.0	13.5	18.5	15.0	16.5	12.5	16.0	13.5
9			---	---	17.5	14.0	17.5	13.5	16.5	12.0	16.5	15.0
10			---	---	17.0	13.5	17.0	12.5	17.0	12.5	17.0	15.5
11			---	---	17.0	13.5	17.0	12.5	17.0	13.0	16.5	15.0
12			13.5	---	15.0	12.0	17.0	13.0	16.5	12.5	16.0	14.5
13			12.5	10.5	14.5	12.0	17.0	13.0	16.0	12.5	15.0	13.0
14			13.5	10.5	14.0	11.5	16.5	13.5	16.0	12.5	13.5	11.5
15			14.5	11.0	17.0	11.5	17.5	13.0	16.0	12.0	14.5	12.5
16			15.0	12.0	17.0	13.0	17.5	13.5	16.5	12.0	15.5	13.5
17			15.0	11.0	16.5	12.5	17.0	13.5	16.0	12.5	15.5	14.0
18			15.5	11.5	17.0	12.5	16.5	13.0	15.5	12.0	15.5	14.5
19			16.0	12.0	17.0	13.0	17.0	12.5	16.0	11.5	14.5	13.0
20			16.0	12.5	18.0	14.5	17.5	13.0	16.0	12.0	14.5	13.5
21			16.0	12.5	18.0	15.0	17.5	13.5	16.0	12.0	14.0	12.0
22			14.5	11.0	18.0	14.0	17.5	13.0	16.0	12.5	14.0	12.5
23			11.5	9.5	16.5	13.5	17.0	13.0	16.5	13.5	14.5	13.0
24			12.0	9.5	16.0	13.0	16.5	12.5	16.5	13.5	15.0	13.5
25			12.0	10.0	15.5	11.5	17.0	12.0	16.5	14.0	14.5	13.0
26			13.0	9.5	15.0	11.5	17.0	12.5	16.5	13.5	15.0	14.0
27			14.5	10.5	16.5	11.5	17.5	13.0	16.0	13.0	15.0	13.0
28			15.0	11.5	17.0	13.0	17.5	13.0	16.0	12.5	14.5	13.0
29			16.0	12.5	17.0	13.0	17.5	13.0	15.0	11.5	14.5	12.5
30			16.0	12.5	16.5	12.5	17.0	13.0	15.0	11.5	14.0	13.0
31			16.5	12.5	---	---	17.0	13.0	15.5	13.0	---	---
MONTH			16.5	9.5	18.0	11.0	18.5	12.0	17.0	11.5	17.0	11.5

14361500 ROGUE RIVER AT GRANTS PASS, OR

LOCATION.--Lat 42°25'50", long 123°19'00", in NW¼ sec.20, T.36 S., R.5 W., Josephine County, Hydrologic Unit 17100308, on right bank at city of Grants Pass filter plant, 0.6 mi (1.0 km) upstream from bridge on State Highway 99 at Grants Pass, and at mile 101.8 (163.8 km).

DRAINAGE AREA.--2,459 mi² (6,369 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1938 to current year. Prior to January 1939 monthly discharge only, published in WSP 1318.

REVISED RECORDS.--WSP 1738: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 885.28 ft (269.833 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 8, 1957, at datum 3.00 ft (0.914 m) higher.

REMARKS.--Water-discharge records good. Flow regulated since February 1977 by Lost Creek Lake (station 14355040), slight regulation by Fish Lake and Emigrant Lake. Large fluctuations at times caused by Savage Rapids Dam 5.5 mi (8.8 km) above station. Many diversions from Rogue River and tributaries above station, the largest of which is at Savage Rapids Dam of Grants Pass Irrigation District, 5.5 mi (8.8 km) above station.

AVERAGE DISCHARGE.--42 years, 3,475 ft³/s (98.41 m³/s), 2,518,000 acre-ft/yr (3.10 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 152,000 ft³/s (4,300 m³/s) Dec. 23, 1964, gage height, 34.15 ft (10.409 m), from rating curve extended above 93,000 ft³/s (2,630 m³/s); minimum, 195 ft³/s (5.52 m³/s) Jan. 30, 1961; minimum daily, 606 ft³/s (17.2 m³/s) Sept. 10, 1968.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in December 1861 reached a stage of about 42 ft (13 m), present datum (information furnished by Corps of Engineers). Flood in February 1890 reached a stage of about 35 ft (11 m), present datum, and that of Feb. 21, 1927, about 31 ft (9 m), present datum, according to local resident.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 38,400 ft³/s (1,090 m³/s) Jan. 13, gage height, 14.65 ft (4.465 m); minimum, 885 ft³/s (25.1 m³/s) Sept. 9; minimum daily, 1,070 ft³/s (30.3 m³/s) Oct. 5-7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1480	1940	2910	6250	2090	2800	2890	3620	1790	1840	2110	1580
2	1210	1670	5090	4190	1910	2610	2770	3440	1850	1800	2100	1580
3	1140	1640	13600	3370	3470	2620	2540	3280	2110	1800	2120	1580
4	1090	1650	7920	2950	3370	4170	2580	3200	2170	1890	2160	1550
5	1070	1990	8480	2830	2630	3290	2450	3130	2170	1950	2130	1550
6	1070	2910	5860	3100	2630	3380	3000	3050	2150	1960	2130	1550
7	1070	2620	4700	2820	2380	3160	3390	3000	2080	1980	2120	1570
8	1120	1940	4220	2580	2210	2940	3570	2940	1990	1930	2150	1530
9	1150	1620	3380	2450	2110	2750	4430	2910	1900	1880	2150	1260
10	1120	1510	3170	2690	2010	2620	4400	3000	1790	1890	2150	1100
11	1120	1480	3130	3170	1930	2610	4190	3110	1860	1880	2150	1160
12	1120	1450	2850	16400	1850	2650	3770	3160	2250	1880	2130	1190
13	1120	1430	2730	26900	1790	3050	3700	3020	2520	1860	2130	1230
14	1210	1430	2650	24400	1760	9750	3620	2610	3090	1890	2160	1250
15	1550	1410	2330	17300	1710	8720	3640	2090	2430	1780	2180	1270
16	1420	1490	2230	19100	1690	6710	3680	1780	2090	1890	2230	1260
17	1370	2140	2170	20100	1690	5590	3590	2230	1830	1900	2240	1220
18	1390	2600	2130	15700	2430	5450	3490	2240	2230	1950	2270	1260
19	1610	2630	2130	10500	3700	4960	3580	2210	2150	2080	2270	1330
20	2050	2300	2130	8180	4350	4620	3770	2090	2090	2080	2240	1330
21	2190	1990	3020	6610	3830	4640	3820	2010	2040	2100	2000	1360
22	1790	2130	3580	5570	3490	4250	6270	2120	2010	2010	1690	1330
23	1680	5030	3290	5210	3590	4010	6270	2360	2050	2000	1480	1290
24	1740	8760	3760	4950	3110	3790	5520	2590	2060	2030	1440	1270
25	3000	6110	3550	4740	2830	3250	4380	2770	2080	2090	1450	1240
26	2570	5920	3050	4330	2700	3140	4090	3110	2030	2110	1460	1220
27	1920	4530	2610	3760	2580	3130	4220	2820	1990	2090	1520	1220
28	1920	3930	2410	3480	3490	2960	3990	2290	1950	2100	1500	1220
29	1770	3640	2330	2350	3200	2730	3850	2010	1900	2110	1550	1250
30	1730	3310	2410	2180	---	2660	3710	1880	1900	2110	1570	1250
31	1920	---	7160	2220	---	2630	---	1760	---	2110	1580	---
TOTAL	47710	83200	120980	240380	76530	121640	115170	81830	62550	60970	60560	40000
MEAN	1539	2773	3903	7754	2639	3924	3839	2640	2085	1967	1954	1333
MAX	3000	8760	13600	26900	4350	9750	6270	3620	3090	2110	2270	1580
MIN	1070	1410	2130	2180	1690	2610	2450	1760	1790	1780	1440	1100
AC-FT	94630	165000	240000	476800	151800	241300	228400	162300	124100	120900	120100	79340

CAL YR 1979 TOTAL 1040170 MEAN 2850 MAX 13800 MIN 1070 AC-FT 2063000
WTR YR 1980 TOTAL 1111520 MEAN 3037 MAX 26900 MIN 1070 AC-FT 2205000

14361500 ROGUE RIVER AT GRANTS PASS, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: August 1973 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 23.5°C June 7, 1977; minimum, 0.5°C on several days in 1974, 1977, 1978, 1980.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 19.5°C July 7, 8, 22; minimum, 0.5°C Jan. 30.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	15.5	14.5	10.5	9.5	7.0	6.5	8.0	7.5	5.0	3.0	8.5	7.5
2	16.0	14.0	10.0	9.0	8.0	6.5	7.5	7.0	6.0	5.0	8.5	7.0
3	16.0	14.0	9.5	9.0	8.5	8.0	7.0	6.5	7.0	6.0	9.5	8.0
4	16.5	14.5	10.0	9.0	8.0	7.5	7.0	6.5	7.0	6.5	9.0	8.0
5	16.5	14.5	10.0	9.0	7.5	7.0	8.0	7.0	6.5	6.0	9.5	8.5
6	16.0	14.5	10.0	9.0	7.5	7.0	8.0	7.5	6.5	5.5	9.0	8.5
7	16.0	14.5	10.0	9.0	7.0	7.0	7.5	7.0	6.5	5.5	9.0	8.5
8	15.5	14.0	9.0	8.5	7.0	7.0	7.0	6.5	6.0	4.5	9.0	8.0
9	15.5	13.5	9.0	7.5	7.5	7.0	7.0	6.0	6.0	4.5	9.5	8.0
10	15.0	13.5	8.5	7.5	7.5	6.5	6.5	5.5	6.5	5.0	9.5	7.5
11	14.5	13.0	8.0	7.0	6.5	5.0	5.5	4.5	6.5	5.5	9.0	8.0
12	14.0	12.5	7.5	6.5	5.5	4.5	8.0	5.5	6.5	5.5	8.5	7.0
13	14.5	13.0	7.0	6.0	5.5	5.0	8.5	5.0	6.0	5.0	7.5	6.5
14	13.5	13.5	6.5	6.0	5.0	4.5	8.5	8.0	6.5	5.0	8.0	7.5
15	13.0	12.5	7.0	6.0	5.0	4.5	8.0	7.0	7.0	5.5	7.5	6.5
16	14.0	12.0	7.5	6.5	5.0	4.0	7.0	6.5	7.5	6.5	7.0	6.0
17	14.0	12.5	9.0	7.5	5.5	4.0	7.5	6.5	8.0	7.0	7.5	7.0
18	13.5	11.5	9.0	8.5	6.5	5.5	6.5	5.5	8.0	7.5	7.5	6.5
19	12.0	10.5	8.5	7.0	7.5	6.5	5.5	4.5	7.5	7.5	8.5	7.5
20	10.5	9.5	7.0	6.0	8.0	7.0	5.5	4.5	8.0	7.0	8.5	8.0
21	10.5	9.5	6.5	5.5	7.5	7.0	5.5	4.5	8.0	7.5	8.0	7.0
22	11.0	9.5	6.5	5.5	7.0	6.0	5.0	4.5	7.5	7.0	8.0	6.5
23	11.0	10.0	7.0	6.0	6.0	5.5	5.5	5.0	7.0	6.5	9.0	7.5
24	11.0	10.0	7.5	6.5	6.0	5.5	5.5	5.0	8.0	6.5	9.0	8.0
25	11.0	10.5	7.5	6.5	6.0	6.0	5.5	5.0	8.5	7.5	10.0	8.0
26	11.5	10.5	6.5	6.0	6.0	6.0	5.0	4.5	9.5	8.0	10.0	9.0
27	11.5	10.5	6.5	6.0	6.0	5.0	5.0	4.0	9.5	9.0	9.5	8.0
28	11.0	10.0	6.5	5.5	5.0	4.0	4.0	3.0	9.5	9.0	9.5	8.0
29	10.0	9.0	6.5	6.0	5.5	4.5	3.0	2.0	9.0	8.5	10.0	8.0
30	9.5	8.0	7.0	6.5	7.0	5.5	2.0	.5	---	---	10.0	8.0
31	10.5	8.5	---	---	7.5	7.0	3.0	1.5	---	---	9.0	8.0
MONTH	16.5	8.0	10.5	5.5	8.5	4.0	8.5	.5	9.5	3.0	10.0	6.0

14361500 ROGUE RIVER AT GRANTS PASS, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.0	7.0	13.5	12.0	17.0	16.0	18.0	16.5	18.5	16.5	16.0	15.5
2	9.0	7.0	14.0	12.5	16.5	14.5	18.0	16.5	18.0	15.5	16.5	15.5
3	9.0	7.5	14.5	13.0	14.5	13.5	18.0	17.5	18.0	15.5	16.0	15.0
4	8.5	7.5	15.5	13.0	15.5	13.0	17.5	16.5	17.5	15.5	16.0	15.5
5	9.5	7.5	15.0	13.5	16.0	14.0	18.0	16.5	17.5	15.0	16.5	16.0
6	9.0	8.5	14.0	12.5	15.5	14.5	19.0	17.0	17.0	14.5	17.0	16.0
7	8.5	8.0	13.0	11.5	16.0	14.5	19.5	17.5	17.0	14.5	17.0	16.0
8	8.5	8.0	13.5	12.0	17.0	15.5	19.5	18.0	17.5	15.0	16.5	15.5
9	10.0	8.5	12.0	11.0	18.0	16.5	19.0	17.0	17.5	15.5	17.5	15.5
10	10.5	9.0	11.0	10.0	18.0	17.0	17.5	16.5	17.5	15.0	19.0	15.5
11	10.5	9.5	10.0	9.5	17.5	16.5	18.0	16.0	18.0	15.5	19.0	16.0
12	11.5	9.5	12.0	10.0	17.0	15.0	18.0	16.5	18.0	15.5	18.0	15.5
13	12.5	11.0	13.0	11.5	15.5	14.0	18.0	16.5	17.5	15.0	16.5	14.0
14	11.5	10.5	13.0	11.5	15.5	13.5	18.5	16.5	17.5	15.5	15.5	13.0
15	11.0	10.0	14.0	12.0	16.5	13.5	18.5	17.0	17.0	15.0	15.0	13.0
16	12.5	10.5	15.0	13.5	17.5	15.0	19.0	17.0	17.0	15.0	16.0	13.0
17	12.5	11.5	15.0	13.5	16.5	14.5	19.0	17.0	17.5	15.0	17.0	14.0
18	12.5	11.5	15.5	13.0	18.0	15.5	18.5	17.0	17.0	15.0	---	15.0
19	12.5	11.5	16.0	13.5	18.0	16.0	18.0	16.0	16.5	14.5	---	---
20	12.5	10.0	16.5	14.5	18.5	16.5	19.0	16.0	17.0	14.0	---	---
21	10.0	8.5	16.5	15.0	19.0	17.5	19.0	16.5	16.5	14.5	---	---
22	9.5	8.5	16.0	13.5	18.5	16.5	19.5	17.0	16.5	15.0	---	---
23	11.0	9.0	14.0	11.5	16.5	16.0	19.0	17.0	16.5	16.0	---	---
24	12.0	11.0	11.5	10.5	17.0	15.5	18.5	16.5	17.5	16.0	---	---
25	12.0	11.5	12.0	10.5	16.5	15.0	18.0	15.5	17.5	16.0	---	---
26	13.5	11.5	12.5	11.0	16.5	14.5	18.5	16.0	18.0	16.0	---	---
27	14.0	12.5	14.5	11.5	16.5	14.5	19.0	16.5	17.0	15.5	---	---
28	15.0	13.5	16.0	13.5	18.0	15.5	19.0	16.5	16.5	15.5	---	---
29	14.0	13.0	16.5	14.5	18.0	16.5	19.0	17.0	16.0	14.5	15.5	13.5
30	13.0	12.0	17.0	15.5	18.0	16.5	18.5	16.5	14.5	13.5	15.5	13.5
31	---	---	17.0	15.5	---	---	19.0	16.5	15.5	14.0	---	---
MONTH	15.0	7.0	17.0	9.5	19.0	13.0	19.5	15.5	18.5	13.5	19.0	13.0

14361590 MIDDLE FORK APPLEGATE RIVER NEAR COPPER, OR

LOCATION.--Lat 42°00'23", long 123°09'23", in W½ sec.17, T.48 N., R.11 W., Mt. Diablo Meridian, Siskiyou County, CA, Rogue River National Forest, Hydrologic Unit 17100309, on left bank 0.2 mi (0.3 km) upstream from Elliot Creek, 1.6 mi (2.6 km) southwest of former town of Copper, and at mile 51.6 (83.0 km).

DRAINAGE AREA.--50.7 mi² (131.3 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1979 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,001.74 ft (610.130 m) National Geodetic Vertical datum of 1929 (Corps of Engineers bench mark).

REMARKS.--Water-discharge records good except those for period of no gage-height record, which are fair. No regulation or diversion.

EXTREMES FOR CURRENT PERIOD.--August to September 1979: Maximum discharge during period, 34 ft³/s (0.96 m³/s) Sept. 2, gage height, 2.60 ft (0.792 m); minimum, 11 ft³/s (0.31 m³/s) Sept. 16-25, 27-30.

Water Year 1980: Peak discharges above base of 1,400 ft³/s (39.6 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Dec. 2	1700	2,000	56.6	6.79	2.070	Jan. 12	1100	*3,280	92.9	*8.47	2.582

Minimum discharge, 10 ft³/s (0.28 m³/s) Oct. 3-14.

Discharge, in cubic feet per second, 1979
Mean Values

Day	Aug.	Sept.	Day	Aug.	Sept.	Day	Aug.	Sept.
1	14	16	11	14	13	21	13	11
2	14	26	12	13	13	22	14	11
3	14	19	13	13	12	23	14	11
4	14	17	14	13	12	24	13	11
5	14	15	15	13	12	25	13	12
6	14	14	16	13	12	26	13	12
7	14	14	17	13	11	27	13	12
8	14	13	18	13	11	28	13	11
9	14	13	19	13	11	29	14	11
10	14	13	20	13	11	30	16	11
						31	15	--
Total							422	391
Mean							13.6	13.0
Max							16	26
Min							13	11
Cfsm							.27	.26
In							.31	.29
Ac-ft							837	776

14361590 MIDDLE FORK APPLEGATE RIVER NEAR COPPER, OR--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	76	120	287	148	483	120	253	93	37	17	12
2	11	62	986	243	183	397	116	253	87	36	17	12
3	10	61	770	200	579	370	114	280	80	34	17	12
4	10	80	453	183	401	333	122	306	79	33	17	12
5	10	135	341	246	341	298	162	287	77	33	16	12
6	10	115	259	291	354	266	165	249	71	32	16	12
7	10	98	221	239	295	239	150	209	70	31	16	11
8	10	84	194	206	263	214	152	197	70	30	16	11
9	10	80	172	191	233	194	233	191	70	29	16	11
10	10	62	157	172	209	178	221	160	68	29	16	11
11	10	58	138	280	194	170	200	150	68	28	15	11
12	10	55	129	2590	180	160	211	150	67	27	15	11
13	10	54	120	2870	167	186	277	152	67	27	14	11
14	12	53	110	2410	157	375	345	155	65	26	14	11
15	16	49	102	1410	152	284	310	150	62	26	14	11
16	16	70	94	1030	150	224	310	143	60	25	14	11
17	12	94	89	805	270	203	366	136	60	24	14	11
18	13	86	89	651	943	180	375	140	57	23	14	11
19	40	73	118	540	861	165	458	148	54	23	14	12
20	68	66	140	438	641	162	594	152	53	23	13	12
21	43	61	203	375	503	155	443	152	50	22	13	12
22	48	150	162	329	424	145	337	136	48	21	13	12
23	64	200	157	295	366	140	325	118	47	20	13	12
24	450	750	160	273	333	136	317	110	45	20	13	12
25	720	430	143	253	337	133	298	106	44	20	12	11
26	270	200	124	230	468	129	310	98	43	20	12	11
27	120	140	116	209	673	124	349	93	41	19	12	11
28	100	130	110	191	752	120	383	89	39	19	12	11
29	88	115	106	170	594	120	341	91	39	18	12	11
30	84	127	120	165	---	122	284	91	39	18	12	11
31	82	---	239	150	---	122	---	93	---	17	13	---
TOTAL	2378	3814	6442	17922	11171	6527	8388	5038	1813	790	442	342
MEAN	76.7	127	208	578	385	211	280	163	60.4	25.5	14.3	11.4
MAX	720	750	986	2870	943	483	594	306	93	37	17	12
MIN	10	49	89	150	148	120	114	89	39	17	12	11
CFSM	1.51	2.51	4.10	11.4	7.59	4.16	5.52	3.22	1.19	.50	.28	.23
IN.	1.74	2.80	4.73	13.15	8.20	4.79	6.15	3.70	1.33	.58	.32	.25
AC-FT	4720	7570	12780	35550	22160	12950	16640	9990	3600	1570	877	678

WTR YR 1980 TOTAL 65067 MEAN 178 MAX 2870 MIN 10 CFSM 3.51 IN 47.74 AC-FT 129100

NOTE.--No gage-height record Oct. 13 to Nov. 12.

14361590 MIDDLE FORK APPLEGATE RIVER NEAR COPPER, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: August 1979 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 21.0°C Aug. 9, 12, 1979, July 29, 1980; minimum, 1.5°C Jan. 29, 30, 1980.

EXTREMES FOR PERIOD AUGUST TO SEPTEMBER 1979.--
WATER TEMPERATURES: Maximum recorded, 21.0°C Aug. 9, 12; minimum, 11.5°C Sept. 10, 29.

EXTREMES FOR WATER YEAR 1980.--
WATER TEMPERATURES: Maximum, 21.0°C July 29; minimum, 1.5°C Jan. 29, 30.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1									---	---	15.5	13.5
2									---	---	16.5	13.5
3									---	---	17.5	14.0
4									---	---	17.0	12.5
5									---	---	17.5	12.5
6									---	---	17.5	12.5
7									---	---	18.0	13.0
8									---	---	18.0	14.5
9									21.0	---	16.5	12.5
10									20.5	15.5	16.5	11.5
11									20.5	15.5	16.5	12.0
12									21.0	15.5	17.0	12.0
13									18.0	16.0	17.5	13.0
14									20.0	14.5	18.0	13.0
15									18.5	15.5	18.0	13.0
16									19.5	15.5	18.0	13.5
17									20.5	15.0	17.5	13.0
18									20.0	14.5	17.0	13.0
19									17.5	15.5	16.5	12.5
20									19.0	14.5	16.5	12.5
21									16.5	14.0	16.5	13.0
22									17.5	14.0	16.5	13.0
23									18.5	14.5	16.0	12.0
24									19.0	13.5	16.0	12.0
25									19.5	14.5	14.5	13.5
26									19.0	14.5	16.0	12.0
27									17.5	14.5	16.0	12.0
28									16.5	15.0	15.5	12.0
29									16.5	14.5	15.5	11.5
30									15.5	13.5	15.5	12.0
31									17.5	12.5	---	---
MONTH											18.0	11.5

14361590 MIODLE FORK APPLEGATE RIVER NEAR COPPER, OR--Continued

TEMPERATURE, WATER (OEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

OAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		OECEMBER		JANUARY		FEBRUARY		MARCH	
1	14.5	11.0	8.0	6.0	6.0	4.5	5.5	5.0	5.0	3.5	6.5	5.5
2	15.0	11.5	8.5	7.0	7.0	6.0	5.5	4.5	5.5	4.5	7.0	6.0
3	15.5	12.0	8.5	7.5	7.0	6.5	5.0	4.5	5.5	4.5	7.0	6.5
4	16.0	12.5	8.5	7.5	7.5	6.5	6.0	5.0	5.0	4.0	6.5	5.5
5	16.0	12.5	8.0	7.5	7.0	5.5	6.0	5.5	5.5	5.0	6.0	5.5
6	15.0	13.5	8.5	7.5	5.5	5.0	5.5	4.5	5.5	5.0	6.0	5.0
7	15.0	12.0	8.0	6.5	6.0	5.0	4.5	3.5	5.0	4.0	6.0	5.0
8	15.5	13.0	7.0	6.0	6.5	5.5	5.0	4.0	4.5	3.5	6.5	5.5
9	14.5	11.5	6.5	5.0	6.5	6.0	5.5	4.5	5.0	4.0	6.5	5.0
10	14.5	11.0	6.0	4.5	6.5	4.0	4.5	3.0	5.5	4.5	6.5	5.0
11	14.0	11.0	5.5	4.0	4.0	3.0	5.0	3.0	5.0	4.0	6.5	5.0
12	14.0	11.5	5.5	4.0	3.5	2.5	5.5	5.0	4.5	4.0	5.0	4.5
13	14.0	12.5	5.5	4.5	3.5	3.0	6.0	5.5	5.0	4.0	5.5	5.0
14	13.0	12.0	5.5	4.0	3.5	3.0	6.0	6.0	5.0	4.5	5.5	4.5
15	14.0	12.0	6.5	4.5	3.5	3.0	6.5	5.5	6.0	5.0	5.0	4.5
16	13.5	10.5	7.5	6.5	4.5	3.0	6.5	6.0	6.5	5.5	5.5	3.5
17	14.0	12.0	7.5	7.0	6.0	4.5	6.5	5.0	6.5	6.0	5.5	4.5
18	12.0	11.0	6.5	5.0	6.0	5.0	5.0	3.5	6.0	5.5	5.5	5.0
19	11.0	9.0	5.5	4.5	6.5	6.0	4.0	3.0	6.0	5.5	6.5	4.5
20	9.0	7.5	4.5	3.5	6.5	6.0	4.5	4.0	6.0	5.5	6.0	5.0
21	9.0	6.5	4.5	3.5	6.0	4.5	4.5	4.0	6.0	5.0	5.5	4.5
22	9.0	8.0	5.5	4.5	4.5	4.0	5.0	4.5	5.5	5.0	7.0	5.0
23	9.5	8.0	6.0	4.5	4.0	3.0	5.0	4.5	6.0	5.0	6.5	5.0
24	9.0	8.5	6.5	6.0	3.5	3.0	5.0	5.0	6.5	5.5	6.5	4.5
25	8.5	8.0	6.0	4.5	4.5	3.5	5.0	4.0	7.0	6.0	6.0	5.0
26	9.0	8.0	4.5	4.0	3.5	3.0	4.0	3.5	7.5	6.5	6.5	5.0
27	9.5	8.5	4.0	3.0	3.5	2.5	3.5	3.0	7.0	6.0	6.5	5.0
28	8.5	7.5	4.5	4.0	4.0	3.0	3.0	2.5	6.0	5.5	6.5	4.0
29	8.0	7.0	5.0	4.0	4.5	3.5	2.5	1.5	6.5	5.0	7.0	4.5
30	8.0	7.0	5.5	4.5	4.5	4.0	2.5	1.5	---	---	6.5	5.0
31	8.5	7.0	---	---	5.5	4.5	3.5	2.5	---	---	5.5	4.5
MONTH	16.0	6.5	8.5	3.0	7.5	2.5	6.5	1.5	7.5	3.5	7.0	3.5

OAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	5.5	4.5	9.0	6.5	11.0	10.0	17.0	13.0	20.0	16.5	17.0	12.5
2	6.5	4.5	10.0	7.0	10.0	8.5	17.0	13.5	19.5	16.5	17.0	13.0
3	5.5	4.5	10.5	7.5	10.0	8.0	16.0	13.0	19.5	16.5	18.0	13.5
4	6.0	5.0	10.5	8.0	9.5	8.0	15.5	13.0	19.0	16.0	18.0	13.5
5	6.5	5.5	10.5	8.5	10.5	8.5	16.0	13.0	18.5	15.5	18.5	14.0
6	5.5	4.0	9.0	8.0	10.5	8.5	16.5	13.5	18.0	15.0	18.5	14.0
7	5.5	4.0	10.0	7.0	11.5	9.0	17.5	13.5	18.5	15.0	18.0	14.0
8	7.0	5.0	8.5	7.5	13.0	9.5	16.5	14.0	18.5	15.5	17.5	13.5
9	7.0	5.5	7.5	6.5	14.0	10.5	15.5	14.0	18.5	15.0	17.5	13.5
10	7.0	5.0	6.5	6.0	14.0	11.0	16.5	13.0	19.0	16.0	18.0	14.0
11	7.5	5.0	8.0	6.0	12.5	11.0	17.0	13.0	19.0	16.0	17.5	13.5
12	8.5	5.5	9.0	7.0	11.5	10.5	17.5	13.5	18.5	16.0	17.0	13.5
13	8.0	6.0	8.5	8.0	10.5	10.0	17.5	13.5	18.5	15.5	15.0	12.5
14	7.0	6.5	9.5	7.5	10.5	9.5	18.0	14.5	18.0	15.5	13.0	10.5
15	7.5	5.5	10.0	7.0	13.5	8.5	18.5	14.5	17.5	15.0	14.5	10.0
16	8.5	5.5	10.0	7.5	13.5	10.5	18.5	15.0	18.0	15.0	15.5	11.0
17	8.0	6.0	10.5	7.5	14.5	11.0	18.5	15.0	17.5	15.0	15.5	11.5
18	8.0	5.5	11.5	8.0	14.5	11.0	18.5	15.0	17.5	15.5	15.5	14.0
19	9.0	6.5	12.0	9.0	15.0	11.5	18.5	14.5	17.0	14.0	15.0	11.0
20	7.0	5.0	12.5	9.5	16.0	12.5	19.0	15.0	18.5	14.0	14.0	12.5
21	5.5	5.0	12.0	9.5	15.5	12.0	20.0	16.5	18.5	13.5	15.0	11.5
22	7.5	5.0	10.5	8.0	13.5	12.0	20.0	16.5	17.5	13.0	14.0	10.0
23	8.5	6.5	8.0	7.0	13.0	11.0	20.0	17.0	18.5	13.5	14.5	10.5
24	8.5	6.5	8.0	6.5	13.0	11.0	19.5	16.5	18.5	14.0	15.0	11.0
25	8.5	6.0	8.5	7.0	13.5	11.0	19.5	16.0	18.5	13.5	15.5	11.5
26	9.5	7.0	9.0	7.0	13.5	10.5	20.0	16.5	18.5	13.5	16.0	12.5
27	10.0	7.0	11.0	7.5	15.0	10.5	20.5	17.0	18.0	13.5	15.0	11.5
28	9.5	7.0	10.5	8.5	16.0	11.5	20.5	17.5	17.0	12.5	15.5	12.0
29	8.5	7.0	11.5	8.5	16.0	12.5	21.0	18.0	15.5	12.5	15.0	11.5
30	8.5	5.5	12.5	9.5	16.5	12.5	20.5	17.5	16.0	12.0	15.0	11.5
31	---	---	12.5	9.0	---	---	20.5	17.5	17.5	13.0	---	---
MONTH	10.0	4.0	12.5	6.0	16.5	8.0	21.0	13.0	20.0	12.0	18.5	10.0

14361600 ELLIOT CREEK NEAR COPPER, OR

LOCATION.--Lat 42°00'16", long 123°09'00", in W½ sec.17, T.48 N., R.11 W., Siskiyou County, CA, Hydrologic Unit 17100309, Rogue River National Forest, on left bank 0.3 mi (0.5 km) upstream from Middle Fork Applegate River and 1.5 mi (2.4 km) south of former town of Copper.

DRAINAGE AREA.--51.8 mi² (134 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1977 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,023.56 ft (616.781 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good. No regulation or diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,690 ft³/s (47.9 m³/s) Dec. 14, 1978, gage height, 5.48 ft (1.670 m); minimum, 6.0 ft³/s (0.17 m³/s) Oct. 19, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 800 ft³/s (22.7 m³/s) and maximum discharge, 1,630 ft³/s (46.2 m³/s) Jan. 13, gage height, 5.40 ft (1.646 m); minimum, 10 ft³/s (0.28 m³/s) Oct. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	34	49	118	110	189	88	205	125	63	28	17
2	12	32	355	94	122	173	87	205	124	61	27	17
3	12	41	244	85	205	171	86	218	119	59	27	17
4	12	43	154	82	144	157	87	245	117	57	26	17
5	12	52	132	92	133	149	98	242	119	57	26	17
6	12	42	110	96	128	137	97	216	117	56	26	16
7	12	35	97	79	119	132	94	202	116	53	25	16
8	12	30	93	77	116	127	95	191	114	52	25	16
9	12	29	87	77	111	122	132	189	114	50	24	16
10	12	26	82	73	108	117	114	177	114	49	24	15
11	11	25	73	108	102	117	108	173	116	47	23	15
12	11	24	69	1210	98	110	113	167	120	45	22	15
13	11	23	67	1410	97	122	128	163	120	44	22	16
14	16	22	63	1210	95	233	142	163	119	43	21	17
15	22	22	61	681	92	165	125	159	113	42	21	16
16	14	61	57	475	92	139	135	153	110	41	20	16
17	14	62	56	381	137	133	157	153	108	41	20	15
18	16	44	56	301	342	128	163	157	104	40	20	19
19	35	38	66	262	293	122	177	171	99	39	20	17
20	44	33	64	228	218	120	242	175	102	38	20	17
21	26	32	83	202	183	114	202	179	97	36	20	19
22	39	83	71	181	169	110	179	167	94	35	19	16
23	38	63	69	169	149	107	189	151	83	33	19	16
24	78	223	87	161	142	101	187	147	82	33	19	15
25	199	111	78	147	149	98	183	142	78	33	19	15
26	55	78	68	140	191	98	198	140	75	33	19	14
27	49	64	63	132	225	97	225	132	71	32	18	14
28	47	57	61	124	262	94	247	130	68	31	19	14
29	38	55	59	113	209	91	247	125	68	30	18	14
30	42	51	69	116	---	91	214	128	67	30	18	13
31	40	---	118	110	---	90	---	128	---	29	18	---
TOTAL	965	1535	2861	8734	4541	3954	4539	5293	3073	1332	673	477
MEAN	31.1	51.2	92.3	282	157	128	151	171	102	43.0	21.7	15.9
MAX	199	223	355	1410	342	233	247	245	125	63	28	19
MIN	11	22	49	73	92	90	86	125	67	29	18	13
CFSM	.60	.99	1.78	5.44	3.03	2.47	2.92	3.30	1.97	.83	.42	.31
IN.	.69	1.10	2.05	6.27	3.26	2.84	3.26	3.80	2.21	.96	.48	.34
AC-FT	1910	3040	5670	17320	9010	7840	9000	10500	6100	2640	1330	946

CAL YR 1979 TOTAL 24734 MEAN 67.8 MAX 387 MIN 11 CFSM 1.31 IN 17.76 AC-FT 49060
WTR YR 1980 TOTAL 37977 MEAN 104 MAX 1410 MIN 11 CFSM 2.01 IN 27.27 AC-FT 75330

14361600 ELLIOT CREEK NEAR COPPER, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1977 to current year.
SUSPENDED SEDIMENT DISCHARGE: November 1977 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 23.0°C Aug. 7, 8, 1978; minimum, 0.0°C Nov. 20, 21, 1977, many days November 1978 to February 1979, Jan. 28-30, 1980.
SEDIMENT CONCENTRATIONS: Maximum daily, 3,330 mg/l Dec. 14, 1977; minimum daily, 0 mg/l many days each year.
SEDIMENT DISCHARGE: Maximum daily, 12,300 tons (11,200 tonnes) Dec. 14, 1977; minimum daily, 0 tons (0 tonnes) many days each year.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 21.5°C July 27-29; minimum, 0.0°C Jan. 28-30.
SEDIMENT CONCENTRATIONS: Maximum daily, 2,030 mg/l Jan. 13; minimum daily, 0 mg/l several days in November and Sept. 25, 26.
SEDIMENT DISCHARGE: Maximum daily, 7,880 tons (7,150 tonnes) Jan. 13; minimum daily, 0 tons (0 tonnes) several days in November and Sept. 25, 26.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
20...	1200	54	14	2.0	74
20...	1800	23	21	1.3	78
22...	1200	57	58	8.9	87
22...	1800	44	31	3.7	92
24...	2330	235	329	209	64
25...	0300	377	361	367	63
25...	0430	374	438	442	64
25...	0600	340	375	344	63
25...	0730	297	222	178	69
25...	1100	183	83	41	67
25...	1700	105	29	8.2	68
DEC					
02...	1130	434	222	260	55
02...	1300	538	657	954	46
02...	1430	600	669	1080	58
02...	1600	670	644	1170	53
02...	1730	755	1008	2060	54
02...	1900	689	833	1550	53
02...	2030	579	527	824	52
02...	2200	492	395	525	51
02...	2330	437	297	350	50
DEC					
03...	0100	393	228	242	52
03...	0230	346	174	163	51
03...	0400	313	144	122	51
03...	0530	286	120	93	48
03...	0600	280	105	79	53
JAN					
11...	2230	313	186	157	47
12...	0015	481	331	430	46
12...	0145	829	782	1750	45
12...	0215	829	1047	2340	48
12...	0430	1040	1238	3480	46
12...	0600	1240	1620	5420	49
12...	0700	1340	1711	6190	52
12...	0830	1390	1714	6430	54
12...	0930	1460	2130	8400	57
12...	1030	1420	2227	8540	55
12...	1130	1430	1992	7690	50
12...	1230	1430	1874	7240	54
12...	1330	1360	1656	6080	53
12...	1400	1360	1466	5380	45

14361600 ELLIOT CREEK NEAR COPPER, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
JAN					
12...	1430	1330	1275	4580	49
14...	0836	1270	1206	4140	36
14...	1050	1260	1271	4320	36
14...	1206	1290	1206	4200	41
14...	1216	1290	980	3410	46
14...	140D	1340	950	3440	51
14...	1530	1280	857	2960	52
14...	1700	1230	954	3170	51
14...	1830	1090	741	2180	53
14...	2000	104D	819	2300	49
14...	2130	977	661	1740	53
14...	2300	966	724	1890	47
15...	0030	901	533	1300	54
15...	0200	859	516	1200	54
15...	0330	834	489	1100	53
15...	0430	799	476	1030	52
15...	0500	775	491	1030	49
15...	0630	765	432	892	46
15...	0800	721	405	788	48
15...	0930	703	360	683	50
JAN					
15...	1100	668	321	579	51
15...	1230	651	288	506	58
15...	1400	639	286	493	61
15...	1530	614	277	459	56
15...	1700	606	264	432	55
15...	1830	579	255	399	46
15...	2000	567	241	369	53
15...	2130	544	283	416	44
15...	2300	522	220	310	51
16...	0030	522	207	292	52
16...	0200	486	213	279	49
16...	0330	500	181	244	55
16...	0500	486	200	262	50
16...	0630	468	154	195	38
16...	0800	489	200	264	45
16...	0930	486	179	235	55
16...	1100	465	112	141	66
16...	1230	465	146	183	56
16...	1400	451	165	201	48
JAN					
16...	I700	458	13I	162	57
16...	1830	458	I50	I85	50
16...	2000	458	145	179	51
16...	2130	451	185	225	38
16...	2300	451	136	I66	52
17...	0030	435	I16	136	47
17...	0200	425	121	139	50
17...	0330	422	87	99	60
17...	0500	409	118	130	46
17...	0630	402	115	I25	47
JAN					
I7...	0800	393	85	90	52
17...	0930	393	76	'81	59
17...	1010	393	77	82	59
17...	1050	387	115	120	44
17...	1110	384	76	79	56
18...	0100	328	61	54	52
FEB					
18...	0630	214	37	2I	59
18...	1230	425	348	399	47

14361600 ELLIOT CREEK NEAR COPPER, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	13.5	10.0	7.5	5.5	5.5	3.5	5.0	4.0	5.0	3.0	6.5	5.0
2	14.0	11.0	8.5	7.0	6.5	5.5	4.5	3.5	5.0	4.0	7.0	5.0
3	14.0	11.0	8.5	7.5	6.0	5.5	4.0	3.5	5.5	4.5	7.0	6.0
4	14.5	11.5	8.5	7.0	7.0	5.5	6.0	4.0	4.5	3.0	6.0	4.0
5	14.5	12.0	8.5	7.0	6.0	4.5	6.0	5.5	5.5	4.0	6.0	5.0
6	14.5	12.5	8.0	6.5	4.5	4.0	5.5	3.5	5.0	4.0	6.0	4.0
7	14.0	11.5	7.0	6.0	5.0	4.0	3.5	2.5	4.0	3.0	6.0	4.0
8	14.5	12.5	6.0	5.0	5.5	4.5	4.0	2.5	4.0	2.5	6.5	4.5
9	13.0	10.5	5.5	4.5	5.5	4.5	4.5	3.5	4.5	2.5	6.5	4.0
10	13.0	10.0	4.5	3.5	6.0	3.5	4.0	2.0	4.5	3.5	6.5	4.0
11	12.5	10.0	4.5	3.0	3.5	1.5	4.5	2.0	4.0	2.5	6.0	4.0
12	13.0	10.5	5.0	3.0	3.0	1.5	5.5	4.5	4.0	2.5	5.0	3.0
13	13.5	11.5	4.5	3.5	3.0	2.0	6.0	5.5	4.0	2.5	6.0	4.5
14	12.5	11.5	4.0	3.0	2.5	2.0	6.0	5.0	5.0	3.0	5.5	4.5
15	12.5	11.5	7.0	3.5	2.5	1.5	6.0	4.5	6.0	4.5	5.0	3.5
16	12.0	10.0	7.5	6.5	3.5	1.5	6.5	5.5	6.5	4.5	5.0	2.5
17	12.5	11.0	7.0	6.0	5.0	3.5	6.0	4.0	6.5	5.5	5.5	3.5
18	11.5	10.0	6.0	4.5	5.5	3.5	4.0	2.5	6.0	5.0	5.5	4.0
19	11.0	8.5	5.0	4.5	5.5	5.0	3.0	2.0	6.0	5.5	6.5	3.5
20	8.5	7.5	4.5	2.5	6.0	5.0	3.5	2.5	6.0	4.5	5.5	4.0
21	8.5	7.0	4.5	2.0	5.0	4.0	4.0	3.0	5.5	4.5	5.0	4.0
22	9.0	8.0	5.5	4.5	4.5	3.0	4.5	3.5	5.5	4.5	7.0	4.0
23	10.0	8.5	5.5	4.0	3.5	2.5	4.5	3.5	5.5	3.5	6.5	4.0
24	10.0	9.0	6.0	5.0	4.0	3.0	4.5	4.0	7.0	5.0	6.5	3.5
25	9.0	8.0	5.0	3.5	3.5	3.5	4.0	3.0	7.5	5.5	6.5	4.0
26	8.5	7.5	4.0	3.0	3.5	2.5	3.0	1.5	8.0	6.5	6.0	4.0
27	10.0	7.5	3.0	2.0	2.5	1.5	2.5	1.5	7.0	6.0	6.5	4.0
28	8.5	7.5	4.0	2.5	3.5	2.0	1.5	.0	6.5	5.5	7.0	3.0
29	7.5	6.5	4.5	3.0	4.0	3.0	.5	.0	6.5	4.0	7.5	3.5
30	8.5	6.5	4.5	3.5	4.5	4.0	1.5	.0	---	---	6.5	4.0
31	8.5	7.0	---	---	5.5	4.5	3.5	1.5	---	---	5.0	3.0
MONTH	14.5	6.5	8.5	2.0	7.0	1.5	6.5	.0	8.0	2.5	7.5	2.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	5.0	3.5	10.0	5.5	11.5	9.0	18.5	11.5	20.0	14.0	15.0	11.0
2	7.0	3.5	11.5	6.0	9.0	7.0	18.0	12.0	19.5	14.0	16.0	12.0
3	6.0	3.0	12.0	6.5	9.0	6.5	16.5	11.5	19.5	14.5	16.0	12.0
4	6.5	4.5	12.0	7.5	9.5	7.0	15.0	11.0	19.0	13.5	16.5	12.5
5	7.0	4.5	11.0	7.5	10.5	7.0	16.0	11.5	18.5	12.5	17.0	13.0
6	5.5	3.0	9.0	7.0	10.5	7.5	17.0	12.0	17.5	12.5	16.5	13.0
7	6.0	3.5	10.5	6.0	13.0	8.5	18.0	11.5	18.5	12.0	16.5	13.0
8	8.0	4.5	8.0	6.5	14.0	8.5	16.0	12.0	18.5	13.5	15.5	12.0
9	7.5	5.0	7.5	5.5	15.0	10.0	14.5	11.5	18.5	12.5	16.0	12.5
10	8.0	4.0	5.5	4.5	15.0	9.5	17.0	10.0	19.0	13.5	16.0	13.0
11	9.0	3.5	7.5	5.5	12.5	9.5	18.0	11.0	18.5	14.0	16.0	12.5
12	10.0	4.5	9.0	6.5	11.5	8.5	18.0	11.5	18.0	13.5	15.0	12.5
13	9.5	5.5	8.5	7.0	10.0	8.5	18.0	11.0	18.0	13.5	14.5	12.0
14	8.0	6.0	10.5	7.0	10.5	8.0	18.5	12.5	17.5	13.5	12.0	9.0
15	9.5	5.0	11.0	5.5	14.5	7.0	19.5	12.5	17.0	12.5	12.5	9.0
16	10.5	5.0	11.5	6.5	13.5	9.5	19.5	13.0	17.0	12.5	13.5	9.5
17	10.5	5.5	12.0	6.0	15.5	10.0	19.5	13.0	17.5	12.5	14.5	10.5
18	10.0	5.0	13.0	7.0	15.5	9.0	19.0	13.0	17.0	13.5	14.5	13.5
19	10.5	6.5	13.5	8.0	16.0	10.0	19.0	12.0	16.5	11.5	13.5	10.5
20	8.0	4.5	14.0	8.5	17.0	11.0	20.5	13.0	16.5	12.0	13.0	12.0
21	5.0	4.5	12.0	8.5	16.0	10.5	21.0	14.5	16.5	12.0	13.0	10.5
22	8.0	4.5	10.0	6.0	12.5	10.5	21.0	14.5	16.0	11.5	12.0	9.0
23	9.5	5.5	7.0	5.0	12.5	9.5	20.5	15.0	16.5	12.0	12.5	9.5
24	9.5	6.0	7.5	5.0	13.0	9.5	20.0	14.0	17.0	12.5	13.0	10.0
25	10.0	5.5	8.5	5.5	13.5	10.0	20.0	13.5	16.5	12.5	13.5	10.5
26	11.0	6.5	9.5	6.0	14.0	8.5	20.5	14.5	16.5	12.0	14.5	12.0
27	11.5	6.5	11.5	6.0	16.0	8.5	21.5	15.0	16.0	12.5	13.5	11.0
28	11.0	7.0	10.5	7.5	17.5	10.0	21.5	16.0	15.0	11.5	13.5	11.0
29	9.5	6.5	13.0	7.0	17.5	11.0	21.5	16.0	14.0	11.0	13.0	10.0
30	9.5	4.5	13.0	8.5	18.0	11.0	20.5	15.0	15.0	11.0	13.0	10.5
31	---	---	13.5	7.5	---	---	20.5	15.5	15.5	12.0	---	---
MONTH	11.5	3.0	14.0	4.5	18.0	6.5	21.5	10.0	20.0	11.0	17.0	9.0

14361600 ELLIOT CREEK NEAR COPPER, OR--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCTOBER MEAN CONCEN-TRATION (MG/L)	OCTOBER LOADS (T/DAY)	NOVEMBER MEAN CONCEN-TRATION (MG/L)	NOVEMBER LOADS (T/DAY)	DECEMBER MEAN CONCEN-TRATION (MG/L)	DECEMBER LOADS (T/DAY)	JANUARY MEAN CONCEN-TRATION (MG/L)	JANUARY LOADS (T/DAY)	FEBRUARY MEAN CONCEN-TRATION (MG/L)	FEBRUARY LOADS (T/DAY)	MARCH MEAN CONCEN-TRATION (MG/L)	MARCH LOADS (T/DAY)
1	3	.10	3	.28	1	.13	14	4.5	27	7.9	9	4.6
2	1	.03	2	.17	416	681	3	.77	---	7.2	6	2.8
3	2	.06	9	1.0	92	61	3	.69	---	19	8	3.7
4	1	.03	6	.70	24	10	2	.44	---	5.4	5	2.1
5	1	.03	6	.85	13	4.6	5	1.2	13	4.7	7	2.8
6	3	.10	2	.23	10	3.0	9	2.3	9	3.1	6	2.2
7	3	.10	0	.00	7	1.8	9	1.9	7	2.2	3	1.1
8	5	.17	0	.00	7	1.8	7	1.5	8	2.5	8	2.7
9	5	.17	0	.00	2	.47	3	.62	7	2.1	21	6.9
10	6	.19	1	.07	2	.44	2	.39	7	2.0	18	5.7
11	7	.22	2	.13	8	1.6	41	30	7	1.9	17	5.4
12	5	.15	2	.13	7	1.3	1710	5780	6	1.6	21	6.2
13	2	.06	2	.12	6	1.1	2030	7880	6	1.6	25	8.2
14	5	.22	0	.00	3	.51	1230	4120	5	1.3	63	42
15	2	.12	0	.00	5	.82	414	797	3	.75	25	11
16	2	.08	21	4.0	3	.46	196	252	5	1.2	23	8.6
17	3	.11	6	1.0	2	.30	97	100	62	38	22	7.9
18	5	.22	2	.24	1	.15	59	48	332	357	14	4.9
19	22	2.1	1	.10	5	.89	---	23	94	74	8	2.6
20	20	2.6	0	.00	9	1.6	---	12	29	17	8	2.6
21	6	.42	1	.09	14	3.1	---	7.0	12	5.9	3	.92
22	26	3.2	58	18	8	1.5	10	4.9	8	3.6	5	1.5
23	10	1.0	3	.51	3	.56	8	3.6	7	2.8	5	1.4
24	94	39	103	68	5	1.2	---	3.5	6	2.3	3	.82
25	158	126	17	5.1	3	.63	---	2.4	10	4.0	5	1.3
26	9	1.3	8	1.7	2	.37	7	2.7	10	5.2	3	.79
27	13	1.7	---	1.0	2	.34	9	3.2	48	36	3	.78
28	5	.64	2	.31	3	.49	19	6.4	40	30	3	.76
29	3	.30	1	.15	1	.16	32	9.9	13	7.3	5	1.2
30	6	.68	3	.42	9	1.7	30	9.4	---	---	5	1.2
31	5	.54	---	---	17	5.4	21	6.2	---	---	6	1.5
TOTAL	---	181.64	---	104.30	---	788.42	---	19115.51	---	647.55	---	146.17

DAY	APRIL MEAN CONCEN-TRATION (MG/L)	APRIL LOADS (T/DAY)	MAY MEAN CONCEN-TRATION (MG/L)	MAY LOADS (T/DAY)	JUNE MEAN CONCEN-TRATION (MG/L)	JUNE LOADS (T/DAY)	JULY MEAN CONCEN-TRATION (MG/L)	JULY LOADS (T/DAY)	AUGUST MEAN CONCEN-TRATION (MG/L)	AUGUST LOADS (T/DAY)	SEPTEMBER MEAN CONCEN-TRATION (MG/L)	SEPTEMBER LOADS (T/DAY)
1	8	1.9	25	14	5	1.7	6	1.0	5	.38	2	.09
2	8	1.9	24	14	6	2.0	5	.82	5	.36	3	.14
3	7	1.6	31	19	5	1.6	3	.48	3	.22	5	.24
4	6	1.4	34	23	3	.95	3	.46	3	.21	6	.28
5	9	2.4	34	22	5	1.6	3	.46	5	.35	---	.23
6	8	2.1	21	12	5	1.6	3	.45	6	.43	---	.22
7	5	1.3	21	11	5	1.6	6	.85	7	.47	---	.22
8	6	1.5	16	8.3	5	1.5	3	.42	7	.47	---	.22
9	17	6.0	13	6.6	6	1.8	2	.27	6	.39	---	.22
10	2	.62	12	5.7	7	2.2	2	.26	6	.38	---	.20
11	3	.88	9	4.2	8	2.5	3	.38	7	.43	---	.20
12	5	1.5	13	5.8	9	2.9	5	.61	9	.54	---	.20
13	7	2.4	10	4.4	3	.97	9	1.1	9	.53	---	.22
14	9	3.5	10	4.4	5	1.6	12	1.4	9	.51	---	.23
15	13	4.4	7	3.0	2	.61	12	1.4	8	.45	---	.22
16	16	5.8	7	2.9	1	.30	12	1.3	8	.44	---	.22
17	25	10	7	2.9	1	.29	12	1.3	8	.44	---	.20
18	20	9.2	12	5.1	2	.56	10	1.1	8	.44	7	.35
19	31	16	14	6.4	3	.81	9	.94	8	.43	5	.24
20	81	56	12	5.7	5	1.4	7	.72	8	.44	3	.14
21	23	13	9	4.3	2	.52	6	.59	9	.49	3	.15
22	13	6.3	8	3.6	2	.51	6	.56	9	.47	3	.13
23	13	6.6	6	2.4	6	1.3	36	3.2	8	.40	3	.13
24	12	6.1	5	2.0	---	1.3	6	.54	9	.47	2	.08
25	15	7.4	6	2.3	6	1.3	6	.54	10	.50	0	.00
26	21	12	14	5.3	6	1.2	3	.26	6	.30	0	.00
27	30	19	13	4.6	6	1.2	3	.26	5	.24	1	.04
28	44	30	10	3.5	6	1.1	3	.25	2	.10	1	.04
29	42	29	3	1.0	6	1.1	3	.25	1	.05	1	.04
30	28	16	6	2.1	6	1.1	5	.40	1	.05	1	.04
31	---	---	5	1.7	---	---	5	.39	1	.05	---	---
TOTAL	---	275.80	---	213.2	---	39.12	---	22.96	---	11.43	---	4.93

14361700 CARBERRY CREEK NEAR COPPER, OR

LOCATION.--Lat 42°01'34", long 123°10'10", in SW¼SW¼ sec.3, T.41 S., R.4 W., Jackson County, Hydrologic Unit 17100309, Rogue River National Forest, on right bank, 1.2 mi (1.9 km) west of former town of Copper and at mile 0.9 (1.4 km).

DRAINAGE AREA.--68.9 mi² (178 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1978 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,990.01 ft (606.555 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good. No regulation. Diversion for irrigation of up to 8 ft³/s (0.2 m³/s) from Sturgis Fork into Thompson Creek above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,220 ft³/s (62.9 m³/s) Jan. 13, 1980, gage height, 6.19 ft (1.887 m); minimum, 8.6 ft³/s (0.24 m³/s) Oct. 4, 5, 12, 13, 1979.

EXTREMES OUTSIDE PERIOD OF RECORD.--Peak of Dec. 14, 1977, reached a stage of 5.90 ft (1.798 m) from floodmarks, discharge, 2,600 ft³/s (73.6 m³/s). A discharge of 4.2 ft³/s (0.12 m³/s) was measured Sept. 16, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,000 ft³/s (56.6 m³/s) and maximum discharge, 2,220 ft³/s (62.9 m³/s) Jan. 13, gage height, 6.19 ft (1.887 m); minimum, 8.6 ft³/s (0.24 m³/s) Oct. 4, 5, 12, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.9	68	96	260	156	408	139	236	92	36	17	13
2	8.9	55	596	200	174	359	134	231	94	35	17	13
3	8.9	59	485	166	365	347	132	248	92	33	17	13
4	8.9	78	313	151	286	310	141	248	92	31	17	13
5	8.6	118	236	190	248	277	171	242	92	34	17	13
6	8.9	102	166	236	260	245	179	219	83	34	17	12
7	8.9	83	127	198	231	217	168	198	83	35	17	13
8	8.9	73	143	166	208	219	174	184	81	34	16	13
9	8.9	69	127	153	187	193	239	184	78	32	15	13
10	8.9	53	120	143	163	184	242	171	76	33	15	13
11	8.9	50	110	179	156	182	222	156	76	32	15	12
12	8.9	47	112	1500	146	171	222	153	80	30	15	12
13	8.6	38	116	1870	139	184	260	151	80	29	15	13
14	11	36	98	1800	132	319	310	146	73	28	14	13
15	16	34	96	1190	127	266	289	143	71	27	15	13
16	11	61	100	787	125	228	277	139	68	27	14	13
17	10	81	112	668	166	211	298	134	68	25	14	12
18	10	78	112	534	559	198	307	127	66	25	14	13
19	27	66	134	448	622	187	316	125	59	24	14	14
20	64	59	143	377	509	184	399	125	61	24	14	14
21	36	55	163	359	412	174	350	125	58	23	13	14
22	42	132	118	316	371	168	298	120	56	22	13	14
23	52	146	136	266	353	166	286	114	53	21	13	13
24	251	566	118	248	341	161	269	114	52	19	13	13
25	570	329	116	234	347	161	254	112	50	19	13	13
26	134	193	116	222	412	153	260	110	50	20	13	12
27	104	104	116	203	505	148	301	104	49	20	13	12
28	85	116	116	193	566	143	298	102	47	19	13	12
29	76	106	102	166	461	143	274	100	46	18	13	12
30	76	100	139	158	---	141	257	96	45	17	14	12
31	71	---	277	156	---	143	---	94	---	17	13	---
TOTAL	1761.1	3155	5059	13737	8727	6590	7466	4751	2071	823	453	385
MEAN	56.8	105	163	443	301	213	249	153	69.0	26.5	14.6	12.8
MAX	570	566	596	1870	622	408	399	248	94	36	17	14
MIN	8.6	34	96	143	125	141	132	94	45	17	13	12
CFSM	.82	1.52	2.37	6.43	4.37	3.09	3.61	2.22	1.00	.39	.21	.19
IN.	.95	1.70	2.73	7.42	4.71	3.56	4.03	2.57	1.12	.44	.24	.21
AC-FT	3490	6260	10030	27250	17310	13070	14810	9420	4110	1630	899	764

CAL YR 1979 TOTAL 36990.9 MEAN 101 MAX 769 MIN 8.6 CFSM 1.47 IN 19.97 AC-FT 73370
WTR YR 1980 TOTAL 54978.1 MEAN 150 MAX 1870 MIN 8.6 CFSM 2.18 IN 29.68 AC-FT 109000

14361700 CARBERRY CREEK NEAR COPPER, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1977 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 23.5°C July 26, Aug. 7, 8, 1978, July 19, 20, 1979; minimum, 0.0°C Nov. 20, 21, 1977, many days during November 1978 through February 1979, Jan. 29, 30, 1980.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 22.5°C July 21, 27-29; minimum, 0.0°C Jan. 29, 30.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	15.0	12.0	8.0	6.0	5.5	4.0	5.5	4.5	5.5	3.5	7.0	5.0
2	15.5	12.5	8.5	7.5	6.5	5.5	5.0	4.0	5.5	4.0	7.5	5.5
3	15.5	13.0	9.0	8.0	6.5	6.0	5.0	4.0	6.0	4.5	7.5	6.0
4	16.0	13.5	8.5	7.5	7.0	6.0	6.0	4.5	5.0	3.5	6.5	4.5
5	16.0	13.5	8.5	7.5	6.5	5.0	6.5	5.5	6.0	4.0	6.5	5.5
6	16.0	14.5	8.0	7.0	5.0	4.5	5.5	4.5	5.5	4.5	6.5	4.5
7	15.0	13.0	8.0	6.5	5.5	4.0	4.5	3.5	4.5	3.5	6.5	4.5
8	15.5	13.5	7.0	5.0	6.0	5.0	4.5	3.5	4.5	2.5	7.0	5.0
9	14.5	12.0	6.5	4.5	6.0	5.0	5.5	4.0	5.0	3.0	7.0	4.5
10	14.5	11.5	5.5	4.0	6.0	4.0	4.0	2.0	5.5	4.0	7.5	4.0
11	14.0	11.5	5.5	3.5	4.0	2.0	4.5	2.5	4.5	3.0	6.5	4.5
12	14.5	12.0	5.5	3.5	3.5	2.0	5.5	4.5	5.0	3.0	5.5	3.5
13	15.0	13.0	5.5	3.5	3.0	2.0	6.0	5.5	5.0	3.0	6.0	4.5
14	13.5	13.0	5.0	3.5	3.0	2.0	6.0	5.5	5.5	3.5	6.0	4.0
15	14.0	12.5	6.5	3.5	3.0	2.0	6.5	5.0	6.5	5.0	5.5	3.5
16	13.5	11.0	7.0	6.5	3.5	2.0	7.0	6.0	6.5	5.0	6.0	3.0
17	14.0	12.0	7.5	6.5	6.0	3.5	6.0	4.5	7.0	6.0	6.0	4.0
18	13.0	11.0	6.5	5.0	6.0	4.5	4.5	3.0	6.0	5.5	6.0	4.5
19	11.5	9.5	5.0	4.5	6.5	5.5	3.5	2.5	6.0	5.5	7.5	4.0
20	9.5	8.5	4.5	3.5	6.0	5.5	4.0	3.0	6.0	5.0	7.0	4.5
21	9.5	7.5	4.5	2.5	5.5	4.0	4.5	3.0	6.5	5.0	5.5	4.5
22	9.5	8.5	5.0	4.5	4.0	3.0	5.0	3.5	6.0	5.0	8.0	4.5
23	10.5	9.0	5.5	4.5	3.0	2.5	5.0	4.0	6.0	4.0	7.5	4.0
24	10.5	9.0	6.5	5.5	3.5	2.5	5.0	4.0	7.0	5.0	7.5	4.0
25	9.0	8.5	5.5	4.0	4.5	3.5	4.0	3.0	7.5	5.5	7.5	4.5
26	10.0	8.0	4.5	4.0	3.5	2.5	3.0	2.0	8.0	6.5	7.5	4.5
27	10.0	8.5	4.0	2.5	3.0	2.0	3.0	1.5	7.0	6.0	7.5	4.5
28	9.0	7.5	4.5	3.0	3.5	2.5	1.5	.5	7.0	5.5	7.5	3.5
29	8.5	7.5	5.0	3.5	4.0	3.5	.5	.0	7.0	4.5	8.0	4.0
30	9.0	7.0	5.0	4.0	4.5	4.0	1.5	.0	---	---	8.0	4.5
31	9.0	7.5	---	---	5.5	4.0	3.5	1.5	---	---	6.0	3.5
MONTH	16.0	7.0	9.0	2.5	7.0	2.0	7.0	.0	8.0	2.5	8.0	3.0

14361700 CARBERRY CREEK NEAR COPPER, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.0	4.0	11.0	6.0	12.5	10.5	19.5	13.5	21.0	16.0	17.0	13.0
2	7.5	4.0	12.0	6.5	10.5	8.5	19.5	14.0	21.0	16.0	17.0	14.0
3	6.5	4.0	12.5	7.0	10.0	8.0	18.0	13.5	21.0	16.5	18.0	13.5
4	7.0	5.0	13.0	8.0	10.0	8.5	16.5	13.0	20.5	15.5	18.0	14.0
5	8.0	5.0	11.5	8.5	11.0	8.5	17.0	13.0	19.5	15.0	18.5	15.0
6	5.5	3.0	10.0	7.5	11.5	8.5	18.5	14.0	19.0	14.5	18.0	15.0
7	6.5	4.0	12.0	6.5	13.5	9.5	19.5	13.5	19.5	14.0	18.0	15.0
8	8.0	4.5	9.5	7.5	15.0	10.0	18.0	14.5	20.0	15.5	17.0	14.0
9	8.0	5.5	8.5	6.5	16.0	11.0	16.0	14.5	19.5	14.5	18.0	14.0
10	9.0	4.5	6.5	5.5	16.0	11.0	18.5	12.5	20.5	15.5	18.0	14.5
11	9.5	4.5	8.5	6.5	14.0	11.5	19.0	13.5	20.0	16.0	17.0	14.5
12	10.5	5.0	10.0	7.5	12.5	10.0	19.0	13.5	20.0	15.5	16.0	14.0
13	9.5	6.0	9.0	8.0	11.5	10.0	19.0	13.5	19.5	15.5	15.5	12.5
14	8.5	6.5	11.5	7.5	11.5	9.5	19.5	15.0	19.0	15.5	13.0	10.5
15	9.5	5.5	12.0	6.5	15.0	8.5	20.5	14.5	18.5	15.0	14.0	10.0
16	10.5	5.5	12.5	7.0	14.5	11.0	21.0	15.5	19.0	14.5	15.0	11.0
17	10.5	6.0	13.0	7.0	16.5	11.5	20.5	15.5	19.0	14.5	16.0	12.0
18	10.5	5.5	14.0	8.0	17.0	11.0	20.0	15.5	19.0	15.5	16.5	14.5
19	10.5	7.0	14.5	9.0	17.0	11.5	20.0	14.5	18.0	13.5	15.5	12.0
20	8.0	5.5	15.5	9.5	18.0	12.5	21.5	15.5	18.5	14.0	14.0	13.0
21	6.0	5.0	13.0	9.5	17.5	12.0	22.5	17.0	18.0	14.0	14.5	12.0
22	8.5	5.5	11.0	8.5	15.0	12.5	22.0	17.0	17.5	13.5	14.0	10.5
23	10.5	6.5	9.0	6.5	14.5	11.0	22.0	17.5	18.0	14.0	14.5	11.0
24	10.0	6.0	9.5	6.5	14.0	11.0	21.0	16.0	18.5	14.5	15.0	11.5
25	10.5	5.5	10.0	6.5	15.5	11.5	21.0	15.5	18.5	14.5	15.5	12.5
26	11.5	7.0	10.0	7.0	14.5	11.0	21.5	16.5	18.0	14.0	16.0	13.5
27	12.5	7.0	12.0	7.0	17.0	10.5	22.5	17.0	18.0	14.5	15.0	12.5
28	11.5	7.0	11.5	9.0	18.0	12.0	22.5	18.0	16.5	13.0	14.5	12.0
29	10.5	7.0	13.0	8.0	18.5	12.5	22.5	18.0	15.5	13.0	14.5	11.5
30	10.5	5.5	14.0	9.5	18.5	12.5	22.0	17.5	16.5	12.0	14.5	11.5
31	---	---	14.5	9.0	---	---	21.5	17.5	17.0	14.0	---	---
MONTH	12.5	3.0	15.5	5.5	18.5	8.0	22.5	12.5	21.0	12.0	18.5	10.0

14362000 APPLEGATE RIVER NEAR COPPER, OR

LOCATION.--Lat 42°03'50", long 123°06'37", in SW¼NW¼ sec.30, T.40 S., R.3 W., Jackson County, Hydrologic Unit 17100309, U.S. Corps of Engineers land, on left bank 0.1 mi (0.2 km) downstream from Brushy Gulch, 3.1 mi (5.0 km) northeast of former town of Copper, and at mile 45.7 (73.5 km).

DRAINAGE AREA.--225 mi^2 (583 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1938 to current year. Prior to January 1939 monthly discharge only, published in WSP 1318.

REVISED RECORDS.--WDR OR-78-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,747.51 ft (532.641 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1977, at site 0.6 mi (1.0 km) upstream at datum 12.15 ft (3.703 m) higher.

REMARKS.--Water-discharge records good. Some storage during winter in Squaw Lakes Reservoir, capacity, 1,100 acre-ft (1.36 hm^3) on Squaw Creek above station. Diversions above station from Carberry Creek for irrigation in Thompson Creek basin.

AVERAGE DISCHARGE.--42 years, 444 ft^3/s (12.57 m^3/s), 321,700 acre-ft/yr (397 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 29,800 ft^3/s (844 m^3/s) Jan. 15, 1974, gage height, 25.38 ft (7.736 m), site and datum then in use, from high-water mark in well, from rating curve extended above 12,000 ft^3/s (340 m^3/s) on basis of four slope-area measurements of peak flows made in 1950, 1955, 1964, and 1974; minimum, 12 ft^3/s (0.34 m^3/s) July 24, 1979, result of closing construction diversion at dam site 0.7 mi (1.1 m) upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft^3/s (56.6 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 25	0330	2,750	77.9	6.44	1.963	Jan. 13	1300	*8,050	228	*11.12	3.389
Nov. 24	1030	2,230	63.2	5.86	1.786	Feb. 18	1830	2,480	70.2	6.33	1.929
Dec. 2	1900	3,490	98.8	7.20	2.195						

Minimum recorded, 18 ft^3/s (0.51 m^3/s) Oct. 9, result of closing construction diversion at dam site 0.7 mi (1.1 km) upstream, but may have been less during period of no gage-height record Oct. 13-15; minimum daily, 20 ft^3/s (0.57 m^3/s) Oct. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	168	311	690	453	1070	411	747	371	154	73	59
2	33	146	1650	592	505	961	399	742	355	148	71	55
3	33	176	1600	505	1110	902	383	779	348	142	73	55
4	33	244	943	461	833	822	399	839	344	142	71	55
5	33	421	773	559	726	768	505	811	344	137	73	53
6	32	342	626	645	747	706	530	747	328	131	71	51
7	31	271	545	559	660	655	500	670	324	123	69	49
8	32	221	487	492	611	611	520	636	316	118	71	51
9	38	188	432	461	569	578	620	621	309	118	73	51
10	32	168	391	436	536	555	620	578	305	115	71	51
11	30	149	344	550	509	541	587	550	305	110	69	49
12	24	134	316	5300	483	505	597	541	309	107	63	49
13	20	124	290	6820	461	559	695	536	312	107	65	53
14	25	115	264	5940	440	1020	800	536	301	102	64	53
15	32	106	243	3330	427	779	737	523	282	102	64	51
16	44	215	226	2370	419	665	737	500	268	100	63	49
17	40	311	213	1900	602	621	833	487	271	95	66	48
18	42	264	206	1510	1830	587	856	492	257	93	61	51
19	129	218	271	1270	1840	532	973	505	246	90	61	55
20	212	185	309	1080	1410	545	1230	518	246	90	59	53
21	124	170	465	943	1150	518	1020	523	233	86	57	55
22	132	379	387	850	1030	492	833	487	226	86	57	53
23	191	442	387	773	902	478	822	444	219	86	57	51
24	508	1500	427	721	828	465	811	436	213	81	57	48
25	1610	917	383	675	828	457	773	423	206	81	55	46
26	455	610	324	631	1060	444	795	411	200	81	55	42
27	304	468	297	587	1370	440	873	387	193	81	55	41
28	268	396	275	545	1550	423	961	383	184	81	57	41
29	209	354	264	500	1240	427	914	371	178	77	55	41
30	200	330	316	483	---	423	795	367	166	75	55	41
31	197	---	665	465	---	419	---	375	---	75	59	---
TOTAL	5127	9732	14630	42643	25129	18968	21529	16965	8159	3214	1970	1500
MEAN	165	324	472	1376	867	612	718	547	272	104	63.5	50.0
MAX	1610	1500	1650	6820	1840	1070	1230	839	371	154	73	59
MIN	20	106	206	436	419	419	383	367	166	75	55	41
AC-FT	10170	19300	29020	84580	49840	37620	42700	33650	16180	6370	3910	2980

CAL YR 1979 TOTAL 114371 MEAN 313 MAX 2360 MIN 20 AC-FT 226900
WTR YR 1980 TOTAL 169566 MEAN 463 MAX 6820 MIN 20 AC-FT 336300

14362000 APPLEGATE RIVER NEAR COPPER, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1973 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: January 1977 to current year.

INSTRUMENTAITON.--Enviro-Lab temperature unit since January 1977.

REMARKS.--Major construction work continued on the Applegate Dam throughout the year. Dam site is approximately 0.5 mi (0.8 km) upstream.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 26.5°C Aug. 7, 1978; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 24.5°C July 21, 27-30; minimum, 0.0°C Jan. 29, 30.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	16.5	14.0	8.5	6.0	6.5	4.0	6.5	4.5	5.5	3.5	6.5	5.0
2	17.0	14.5	9.0	7.5	7.0	6.0	5.5	4.5	5.5	4.5	7.5	5.5
3	17.5	14.5	9.5	8.0	7.5	6.5	5.5	4.5	6.5	4.5	7.5	6.0
4	17.5	15.0	9.5	8.0	7.5	6.5	6.5	5.0	5.0	3.5	6.5	4.5
5	18.0	15.5	8.5	7.5	7.5	5.5	6.5	6.0	5.5	4.5	6.5	5.5
6	18.0	15.5	9.5	7.5	6.0	5.0	6.5	4.5	6.0	4.5	7.5	4.5
7	16.5	14.5	9.5	7.0	6.0	5.0	4.5	3.5	5.0	3.5	7.5	4.5
8	17.0	15.0	8.5	5.5	7.0	5.5	5.0	3.5	5.0	3.0	6.5	5.0
9	16.5	13.0	8.0	5.0	7.0	5.5	5.5	4.0	5.5	3.0	8.0	4.5
10	16.5	12.0	7.5	4.0	6.5	4.5	4.0	2.5	6.0	4.0	8.5	4.5
11	16.0	12.0	7.0	3.5	4.5	2.5	5.5	2.5	5.0	3.0	7.0	4.5
12	16.0	12.5	6.5	3.5	4.5	2.5	6.0	5.5	5.5	3.0	6.0	4.0
13	16.0	13.5	7.0	4.0	4.0	2.5	6.5	6.0	5.5	3.0	6.5	4.5
14	15.0	13.0	7.0	3.5	4.0	2.5	6.5	5.5	5.0	3.5	7.0	4.5
15	16.0	12.5	7.0	4.0	4.0	2.0	6.5	5.5	6.5	3.5	5.5	3.5
16	14.5	11.5	7.5	7.0	4.0	2.0	7.0	6.0	7.0	5.5	6.5	3.0
17	15.0	12.5	8.5	7.0	7.0	4.0	6.5	4.5	7.5	6.0	6.0	4.0
18	14.5	11.5	7.5	5.5	6.0	4.5	4.5	3.0	6.0	5.5	6.0	4.5
19	12.0	9.5	7.0	5.0	7.0	6.0	4.0	2.5	6.5	5.5	8.0	4.0
20	9.5	8.5	5.5	4.0	7.0	6.0	4.5	3.0	6.5	5.0	7.0	4.5
21	10.5	7.5	5.0	2.5	6.0	5.0	5.0	3.0	6.5	4.5	5.5	4.5
22	9.5	8.0	5.5	4.5	5.0	3.5	5.5	4.0	6.0	5.0	8.5	4.5
23	11.0	9.0	6.5	4.5	3.5	3.5	5.5	4.0	6.0	4.0	8.0	4.5
24	10.0	9.5	7.0	6.0	4.0	3.5	5.5	4.0	7.0	5.5	8.0	4.0
25	9.5	8.5	6.0	4.5	5.5	3.5	5.0	3.0	7.5	5.5	8.0	4.5
26	10.5	8.0	5.0	4.0	4.5	3.0	3.5	2.0	8.5	6.5	8.0	4.5
27	10.5	8.5	4.5	3.0	4.0	2.0	3.5	1.5	7.0	6.0	8.5	4.5
28	9.5	8.0	5.0	3.5	4.0	2.5	2.5	.5	7.0	5.5	8.5	3.5
29	10.0	7.5	5.0	3.5	5.0	3.5	1.5	.0	6.5	4.5	8.5	3.5
30	9.5	7.5	6.0	4.0	5.5	4.5	1.5	.0	---	---	8.0	4.5
31	10.5	7.5	---	---	6.0	4.5	4.0	1.5	---	---	6.0	4.0
MONTH	18.0	7.5	9.5	2.5	7.5	2.0	7.0	.0	8.5	3.0	8.5	3.0

14362000 APPLEGATE RIVER NEAR COPPER, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.0	4.5	11.5	6.5	13.5	10.5	20.5	14.0	23.0	17.5	---	---
2	8.0	4.5	12.5	7.0	11.0	8.5	20.0	14.5	23.0	17.5	20.0	---
3	6.5	4.0	13.5	7.5	12.0	7.5	18.0	13.5	23.0	18.0	20.5	15.0
4	7.0	4.5	13.5	8.5	11.5	8.0	17.0	13.5	22.5	17.0	21.0	15.5
5	8.5	5.5	12.5	8.5	12.5	8.0	19.0	13.5	21.5	16.0	21.5	16.0
6	6.5	3.5	10.5	8.0	13.0	8.5	20.5	14.0	21.5	15.5	20.0	16.0
7	8.0	4.0	12.5	7.0	15.0	9.5	21.0	14.5	22.0	15.0	20.0	16.0
8	8.0	5.0	10.5	7.5	16.5	10.0	19.5	15.0	22.0	16.5	20.0	15.0
9	8.5	5.5	9.0	7.0	17.0	11.0	17.5	14.5	22.5	16.0	20.0	15.0
10	9.0	4.5	7.0	5.5	17.0	11.5	19.5	13.0	23.5	17.0	20.5	15.5
11	9.5	3.5	8.5	6.5	14.5	11.0	20.0	14.0	23.0	17.0	20.0	15.5
12	11.0	5.5	11.0	7.5	13.0	10.5	20.5	14.5	22.5	17.0	19.0	15.0
13	10.0	6.0	10.0	8.0	11.5	10.0	20.5	14.0	22.5	16.5	18.5	14.5
14	8.5	6.0	12.0	7.5	12.5	9.5	21.0	15.5	22.0	16.5	15.0	11.5
15	10.0	5.5	12.5	7.0	16.5	8.0	22.0	15.0	21.5	16.0	17.0	11.0
16	11.0	5.5	13.0	7.5	16.0	11.0	22.0	16.0	21.5	15.5	18.0	12.0
17	10.5	6.0	13.5	7.5	17.5	11.5	22.0	16.5	21.5	15.5	17.5	13.0
18	10.5	5.5	14.5	8.5	17.5	11.0	21.5	16.5	---	---	18.0	15.0
19	11.0	7.0	15.5	9.5	18.0	11.5	21.5	15.5	21.0	---	17.5	13.0
20	9.0	5.5	16.0	10.0	19.0	13.0	23.0	16.5	21.0	15.0	16.5	14.0
21	7.0	4.5	14.0	10.0	18.5	12.5	24.5	18.0	20.5	15.0	17.0	13.0
22	8.5	5.0	11.5	8.5	15.5	12.5	23.5	18.0	20.5	14.5	16.5	12.0
23	10.5	6.0	9.0	6.0	15.5	11.0	23.5	18.5	21.0	15.0	17.5	12.5
24	10.0	6.5	10.0	5.5	14.0	11.0	23.0	17.5	21.5	15.5	18.0	13.0
25	10.5	6.0	10.0	6.5	16.5	10.5	22.5	17.0	21.0	15.5	18.0	13.5
26	11.5	7.0	11.0	7.0	16.5	10.5	23.5	17.5	20.5	15.0	18.5	14.5
27	12.5	7.0	13.5	7.5	18.0	10.5	24.5	18.5	20.5	15.0	18.0	14.0
28	11.5	7.5	12.5	9.0	19.0	12.0	24.5	19.5	---	14.5	17.5	13.5
29	10.5	7.0	14.5	8.5	19.0	12.5	24.5	19.5	---	---	17.5	13.0
30	11.0	5.5	15.0	9.5	19.5	13.0	24.5	18.5	---	---	17.0	13.0
31	---	---	15.5	9.5	---	---	24.0	19.0	---	---	---	---
MONTH	12.5	3.5	16.0	5.5	19.5	7.5	24.5	13.0	23.5	14.5	21.5	11.0
YEAR	24.5	.0										

14366000 APPLEGATE RIVER NEAR APPLEGATE, OR

LOCATION.--Lat 42°14'30", long 123°08'20", in NE¼ sec.26, T.38 S., R.4 W., Jackson County, Hydrologic Unit 17100309, on left bank 0.9 mi (1.4 km) downstream from Keeler Creek, 1.8 mi (2.9 km) southeast of Applegate, and at mile 26.7 (43.0 km).

DRAINAGE AREA.--483 mi² (1,251 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1938 to current year.

REVISED RECORDS.--WSP 1738: Drainage area. WSP 1935: 1953(M), 1956(M). WDR OR-76-1: 1956(M), 1965(M).

GAGE.--Water-stage recorder. Datum of gage is 1,285.33 ft (391.769 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 23, 1938, nonrecording gage at same site and datum.

REMARKS.--Water-discharge records good. No appreciable regulation. Many diversions for irrigation above station. McDonald Creek Canal diverts from McDonald Creek above station for irrigation in Bear Creek basin. Thompson Creek Irrigation Association ditch diverts above station for irrigation in Thompson Creek basin. Fowler-Keeler and Berryman ditches divert above station for irrigation below.

AVERAGE DISCHARGE.--42 years, 548 ft³/s (15.52 m³/s), 397,000 acre-ft/yr (490 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,200 ft³/s (1,050 m³/s) Jan. 15, 1974, gage height, 20.41 ft (6.221 m), from rating curve extended above 18,000 ft³/s (510 m³/s) on basis of slope-area measurements of flow at gage heights 18.00 ft (5.486 m) and 19.57 ft (5.965 m); minimum, 4.6 ft³/s (0.13 m³/s) Sept. 22-25, 1979.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 20, 1927, reached a stage of 18.7 ft (5.70 m), from floodmarks.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,500 ft³/s (70.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 25	0700	3,220	91.2	5.48	1.670	Jan. 13	1600	*9,980	283	*9.58	2.920
Nov. 24	1330	2,520	71.4	4.90	1.494	Feb. 18	2100	2,930	83.0	5.32	1.622
Dec. 2	2200	4,070	115	6.13	1.868						

Minimum, 9.4 ft³/s (0.27 m³/s) Oct. 4, 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	240	368	876	546	1270	511	896	436	174	41	33
2	22	204	1420	754	551	1150	492	883	428	159	39	32
3	21	209	2210	642	1240	1080	473	896	428	154	40	30
4	14	259	1150	582	1040	1000	478	966	419	149	39	33
5	14	406	1010	637	862	931	572	959	441	154	35	33
6	20	377	797	791	896	856	637	896	428	146	33	33
7	24	311	688	688	785	791	593	791	410	131	28	33
8	24	265	615	615	729	735	588	754	402	120	26	34
9	24	236	551	567	682	700	772	729	393	120	29	32
10	27	212	501	551	637	665	791	705	389	122	31	31
11	25	195	445	516	609	648	729	665	385	116	31	30
12	21	182	414	5900	577	615	717	659	428	110	32	28
13	18	171	385	8420	546	637	810	642	436	104	29	28
14	26	161	360	7960	526	1200	944	648	428	95	30	35
15	74	149	337	4730	511	1080	883	620	397	91	31	37
16	68	201	318	3190	497	889	856	593	377	86	34	35
17	64	360	300	2680	582	823	952	572	372	79	37	33
18	59	318	289	2040	1990	779	987	572	345	71	34	35
19	112	272	333	1680	2310	705	1050	577	333	74	35	39
20	249	240	364	1420	1770	717	1410	593	329	68	37	40
21	221	218	541	1230	1440	682	1270	609	307	65	32	43
22	140	341	506	1080	1280	637	1020	572	289	62	31	47
23	218	567	482	987	1130	615	1000	531	279	65	29	41
24	259	1490	556	917	1020	593	987	516	272	62	31	42
25	2020	1110	526	849	980	582	937	487	259	55	33	38
26	598	723	450	785	1210	562	952	482	252	57	30	35
27	360	546	406	729	1480	551	1020	459	240	54	29	33
28	353	464	381	665	1960	531	1130	445	227	53	25	30
29	289	414	364	604	1490	526	1100	436	215	45	31	28
30	262	389	406	588	---	521	966	428	195	41	30	29
31	272	---	791	582	---	511	---	436	---	42	33	---
TOTAL	5923	11230	18264	54255	29876	23582	25627	20017	10539	2924	1005	1030
MEAN	191	374	589	1750	1030	761	854	646	351	94.3	32.4	34.3
MAX	2020	1490	2210	8420	2310	1270	1410	966	441	174	41	47
MIN	14	149	289	516	497	511	473	428	195	41	25	28
AC-FT	11750	22270	36230	107600	59260	46770	50830	39700	20900	5800	1990	2040

CAL YR 1979 TOTAL 134189.0 MEAN 368 MAX 2780 MIN 4.6 AC-FT 266200
WTR YR 1980 TOTAL 204272.0 MEAN 558 MAX 8420 MIN 14 AC-FT 405200

14366000 APPLEGATE RIVER NEAR APPLEGATE, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: August 1973 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 28.0°C July 29, 30, Aug. 3, 4, 1974; minimum, 0.0°C on several days 1975-80.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 26.5°C July 21, 27, but may have been higher during period of missing record in July and August; minimum, 0.0°C Jan. 29, 30.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	18.5	15.0	10.0	8.5	6.0	4.5	6.5	5.5	5.5	3.0	6.5	5.5
2	18.5	15.0	10.0	9.0	7.5	6.0	5.5	4.5	5.5	5.0	8.0	6.0
3	19.0	15.5	10.5	9.0	7.5	6.5	6.5	5.0	6.5	5.5	7.5	7.0
4	19.0	16.0	10.0	9.0	7.5	6.0	6.5	5.0	5.5	4.5	7.0	5.5
5	19.0	16.0	10.5	8.5	7.5	6.0	7.0	6.5	5.5	4.5	8.0	6.0
6	18.0	17.0	9.5	8.0	6.5	6.0	7.5	6.5	6.5	5.0	7.5	5.0
7	17.5	15.5	10.0	8.0	6.5	5.5	6.5	4.5	5.5	4.0	7.5	5.5
8	18.0	16.0	9.0	7.0	7.0	6.0	5.0	4.0	5.0	3.0	8.0	5.5
9	17.5	14.5	8.5	6.5	7.0	6.0	5.5	4.5	5.5	3.0	8.5	5.0
10	17.0	14.5	7.5	5.5	7.0	5.5	5.5	3.5	6.5	4.5	8.5	5.0
11	---	14.5	7.5	5.0	5.5	3.5	5.0	3.0	5.5	3.5	8.0	6.0
12	---	---	6.5	4.5	4.5	3.0	6.0	5.0	5.5	3.0	7.0	4.5
13	---	---	7.0	4.5	4.5	2.5	6.5	6.0	6.0	3.5	7.5	5.5
14	---	---	6.5	4.5	3.5	2.5	7.0	6.5	5.5	4.0	6.5	5.5
15	---	---	6.5	4.0	3.5	2.5	6.5	5.5	7.0	5.0	6.0	4.0
16	16.0	---	8.0	6.5	3.0	2.0	7.0	6.5	7.0	5.5	7.0	3.5
17	16.5	14.5	9.0	8.0	6.5	3.0	7.0	5.5	8.0	6.5	6.0	4.5
18	15.5	14.0	8.5	7.0	6.5	5.0	5.5	3.5	7.0	6.0	7.5	5.0
19	14.0	12.0	7.0	6.0	7.5	6.0	4.0	2.5	6.5	6.0	8.5	4.5
20	12.0	10.5	6.5	5.0	7.5	6.0	4.5	3.0	7.0	6.0	7.5	5.5
21	12.0	9.0	5.5	3.5	6.5	6.0	4.5	3.0	7.0	5.5	6.5	5.5
22	12.0	10.5	6.0	5.0	6.0	4.5	5.5	3.5	7.5	5.5	9.0	4.5
23	12.5	10.5	6.0	5.0	5.0	4.0	5.5	4.0	6.0	4.5	9.0	5.5
24	12.5	11.0	7.0	6.0	5.0	4.0	5.5	4.0	7.5	5.5	8.5	5.0
25	11.0	9.5	6.5	5.5	5.0	4.0	5.0	3.5	8.0	6.0	9.5	6.0
26	11.5	9.0	6.0	5.0	5.0	3.5	4.0	2.5	9.0	7.5	8.5	6.0
27	11.5	10.0	5.0	4.0	4.0	2.5	4.0	3.0	8.0	7.0	9.0	6.0
28	11.0	9.5	5.5	4.0	4.0	2.5	3.0	1.0	7.5	6.0	9.0	5.0
29	11.0	9.0	5.5	4.0	6.0	4.0	1.5	.0	6.5	5.0	9.0	5.5
30	10.5	9.0	6.0	4.5	6.5	4.5	1.0	.0	---	---	9.5	6.0
31	12.0	9.5	---	---	6.5	5.5	3.0	1.0	---	---	7.0	5.5
MONTH	19.0	9.0	10.5	3.5	7.5	2.0	7.5	.0	9.0	3.0	9.5	3.5

14366000 APPLEGATE RIVER NEAR APPLEGATE, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.5	5.5	12.0	8.0	---	---	23.0	16.0			---	---
2	10.0	5.5	13.0	9.0	---	---	22.5	16.5			---	---
3	7.0	5.5	14.0	9.5	---	---	20.0	16.0			---	---
4	8.0	5.5	14.0	10.5	---	---	21.0	16.0			---	---
5	9.5	6.5	13.5	10.5	---	---	22.0	16.0			---	---
6	7.5	5.5	12.0	10.0	---	---	22.5	16.5			---	---
7	7.0	4.5	13.0	8.5	---	---	23.5	17.0			---	---
8	8.5	6.0	11.5	9.5	---	---	22.0	18.0			---	---
9	10.0	7.0	10.0	8.5	---	---	22.0	17.0			---	---
10	10.0	6.0	8.5	7.0	---	---	22.5	16.0			---	---
11	10.0	6.0	9.5	7.0	16.5	13.5	23.0	16.5			---	---
12	11.5	7.0	12.0	8.5	17.0	12.5	23.0	17.5			---	---
13	10.0	8.0	11.0	9.5	14.0	12.0	23.5	17.0			---	---
14	10.0	8.0	13.0	9.0	14.0	11.0	23.5	18.5			---	---
15	11.0	7.0	13.5	9.0	17.5	10.5	24.5	18.5			17.5	---
16	11.5	7.5	14.0	9.5	16.5	13.5	24.5	19.0			18.5	14.0
17	11.0	8.0	14.5	10.0	18.5	13.5	24.5	19.0			18.5	15.0
18	11.0	7.5	15.5	10.5	19.0	13.5	23.5	18.5			18.5	17.0
19	12.0	8.5	16.5	11.5	19.5	14.0	24.0	18.0			18.5	14.5
20	10.5	6.5	17.0	12.5	20.5	15.5	25.5	19.0			17.5	16.0
21	6.5	5.5	15.5	12.5	20.0	14.5	26.5	20.5			18.0	14.5
22	---	6.0	13.0	10.0	17.5	14.5	26.0	20.5			17.5	13.5
23	11.5	---	10.5	8.0	17.0	13.5	25.0	20.5			18.0	14.0
24	11.5	8.0	11.5	8.0	16.5	13.5	25.0	19.5			18.5	14.5
25	11.0	7.5	12.0	8.5	18.5	13.0	24.5	19.0			19.0	15.0
26	12.5	9.0	13.0	9.0	18.5	13.0	25.5	19.5			19.5	16.5
27	13.0	9.0	15.0	9.5	20.0	12.5	26.5	20.5			18.0	15.0
28	12.5	10.0	15.5	11.5	21.5	14.5	---	21.5			18.0	14.5
29	11.5	9.0	16.0	10.5	21.0	15.0	---	---			18.0	14.5
30	11.5	7.5	---	12.0	22.0	15.0	---	---			17.5	14.5
31	---	---	---	---	---	---	---	---			---	---
MONTH	13.0	4.5	17.0	7.0	22.0	10.5	26.5	16.0			19.5	13.5

14369500 APPLEGATE RIVER NEAR WILDERVILLE, OR

LOCATION.--Lat 45°21'15", long 123°24'20", in SE¼NE¼ sec.16, T.37 S., R.6 W., Josephine County, Hydrologic Unit 17100309, on left bank 0.3 mi (0.5 km) downstream from Jackson Creek, 3.6 mi (5.8 km) southeast of Wilderville, and at mile 7.6 (12.2 km).

DRAINAGE AREA.--698 mi² (1,808 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1938 to September 1955, September 1978 to current year.

REVISED RECORDS.--WSP 1318: 1943. WSP 1738: 1951, 1953, drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 947.18 ft (288.700 m) National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). Prior to Sept. 1, 1978, nonrecording gage at site 1,100 ft (335 m) upstream at datum 2.36 ft (0.719 m) higher.

REMARKS.--Water-discharge records good. Many diversions for irrigation above station. Wilderville ditch diverts up to 16 ft³/s (0.45 m³/s) 0.3 mi (0.5 km) upstream and at the mouth of Jackson Creek.

AVERAGE DISCHARGE.--19 years, 717 ft³/s (20.31 m³/s), 519,500 acre-ft/yr (641 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 47,500 ft³/s (1,350 m³/s) Jan. 18, 1953, gage height, 18.3 ft (5.58 m) from floodmark, site and datum then in use, from rating curve extended above 12,000 ft³/s (340 m³/s) as explained below; minimum, 0.78 ft³/s (0.022 m³/s) Aug. 22-24, 1979.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 22, 1955, reached a stage of 20.3 ft (6.19 m) from floodmark, former site and datum, discharge, 66,500 ft³/s (1,880 m³/s), from rating curve extended above 12,000 ft³/s (340 m³/s) on basis of slope-area measurement of peak flow.

Flood of February 1927 reached a stage of 22 ft (6.7 m) at former site, from local resident. Floods of Dec. 22, 1964, and Jan. 15, 1974, are known to have exceeded the December 1955 flood.

No flow was observed at present site during the late summer of 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,100 ft³/s (399 m³/s) Jan. 13, gage height, 10.39 ft (3.167 m); minimum, 1.1 ft³/s (0.031 m³/s) Aug. 7, 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	355	547	1990	781	1830	789	1180	503	190	16	34
2	14	315	1570	1560	789	1650	757	1140	497	171	13	24
3	12	295	3750	1270	1760	1560	725	1130	522	164	11	18
4	9.8	334	1930	1090	1640	1480	725	1180	510	157	7.6	11
5	8.1	473	1630	1040	1340	1350	831	1190	522	157	7.6	9.2
6	12	497	1290	1190	1320	1270	1080	1120	510	160	8.1	8.6
7	10	422	1100	1090	1180	1170	1050	1000	485	153	5.8	8.6
8	13	365	945	955	1100	1090	992	936	468	123	2.5	12
9	14	324	831	874	1010	1020	1340	909	450	117	5.8	12
10	16	295	741	918	936	964	1400	900	439	117	5.4	13
11	19	277	629	848	882	936	1250	848	428	117	14	12
12	18	259	594	7740	831	882	1170	831	462	108	17	15
13	23	243	547	11800	781	1180	1200	797	479	94	12	13
14	29	231	510	12000	757	3410	1330	797	479	92	8.1	16
15	57	219	473	7650	725	2460	1300	757	450	87	3.6	28
16	111	243	445	4870	702	1850	1230	717	422	84	5.0	39
17	100	428	428	4350	741	1640	1290	679	411	68	9.2	33
18	97	462	411	3290	2380	1540	1330	665	390	68	11	29
19	137	428	450	2570	3660	1350	1350	636	365	60	7.6	33
20	334	370	485	2150	2740	1300	1660	643	355	60	6.2	39
21	370	334	1040	1850	2190	1240	1780	672	340	55	7.1	39
22	247	503	983	1630	1930	1140	1430	643	315	42	6.2	40
23	282	1240	945	1490	1740	1080	1360	622	310	37	6.2	43
24	365	2450	1220	1370	1600	1020	1330	622	305	36	8.6	42
25	2240	1980	1070	1270	1480	983	1270	594	291	34	12	40
26	992	1320	848	1180	1630	936	1260	580	282	33	9.8	39
27	554	955	717	1100	1780	909	1300	554	268	34	10	39
28	510	773	643	1000	2520	856	1410	541	247	30	9.2	40
29	439	665	594	900	2090	831	1400	522	235	24	7.6	40
30	395	594	710	848	---	805	1270	503	215	22	7.1	36
31	395	---	2300	831	---	789	---	503	---	21	9.2	---
TOTAL	7835.9	17649	30376	82714	43015	40521	36609	24411	11955	2715	269.5	805.4
MEAN	253	588	980	2668	1483	1307	1220	787	399	87.6	8.69	26.8
MAX	2240	2450	3750	12000	3660	3410	1780	1190	522	190	17	43
MIN	8.1	219	411	831	702	789	725	503	215	21	2.5	8.6
AC-FT	15540	35010	60250	164100	85320	80370	72610	48420	23710	5390	535	1600

CAL YR 1979 TOTAL 186462.38 MEAN 511 MAX 3750 MIN .85 AC-FT 369800
WTR YR 1980 TOTAL 298875.80 MEAN 817 MAX 12000 MIN 2.5 AC-FT 592800

14369500 APPLEGATE RIVER NEAR WILDERVILLE, OR--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: September 1978 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 28.0°C July 20, 1979; minimum, 0.5°C Dec. 30, 31, 1978, Jan. 29, 30, 1980.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 27.0°C July 31; minimum, 0.5°C Jan. 29, 30.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	20.0	17.5	12.5	11.0	7.5	6.5	8.0	7.0	5.5	3.5	7.5	6.5
2	19.5	17.0	12.0	11.0	9.0	7.5	7.0	6.5	6.5	5.5	9.0	7.0
3	20.5	17.5	12.0	11.0	8.5	7.5	7.5	6.5	8.0	6.5	9.0	8.0
4	20.0	18.0	12.0	11.0	8.5	7.0	7.0	6.5	6.5	5.5	9.0	6.5
5	20.0	18.0	12.0	11.0	9.0	7.5	8.5	7.0	6.0	5.5	9.0	7.0
6	20.5	18.5	11.5	10.5	7.5	7.5	8.5	7.5	7.5	5.5	9.0	6.5
7	19.5	17.5	12.0	10.5	7.5	7.0	7.5	6.0	6.5	5.0	9.5	6.5
8	19.0	17.0	11.0	9.5	7.5	7.0	6.5	5.5	6.0	4.0	9.5	7.0
9	19.5	16.5	10.0	9.0	8.0	7.5	6.5	6.0	6.5	4.5	10.0	7.0
10	18.5	16.5	10.0	9.0	8.0	6.5	6.0	5.0	7.5	5.0	10.5	6.5
11	18.5	16.5	10.0	8.5	6.5	5.0	6.0	4.5	6.0	5.0	9.5	7.5
12	19.0	16.5	9.0	8.0	5.5	4.5	7.5	6.0	6.0	5.0	8.0	6.5
13	19.0	17.5	8.5	8.0	5.5	4.0	8.0	7.0	6.5	5.0	8.0	7.0
14	18.0	17.0	8.5	7.5	4.5	4.0	8.0	7.0	6.5	5.0	8.5	7.0
15	18.0	16.5	9.0	7.5	5.0	4.5	7.0	6.5	7.5	5.5	8.0	6.0
16	19.0	16.0	9.5	8.5	5.0	4.5	8.0	7.0	7.5	6.5	8.5	5.5
17	18.5	16.5	11.0	9.0	6.5	4.5	8.0	6.5	8.5	7.0	8.0	6.5
18	17.0	15.0	10.0	8.5	7.0	6.5	6.5	4.5	8.0	7.0	9.5	6.5
19	15.0	13.5	8.5	7.5	8.5	7.0	5.0	3.5	7.5	6.5	10.0	6.0
20	13.5	12.5	7.5	6.5	8.0	7.5	5.5	3.5	8.5	6.5	9.0	7.0
21	13.5	11.5	7.0	6.0	7.5	7.0	5.5	4.0	8.5	6.5	8.5	6.5
22	13.5	12.5	8.0	7.0	7.0	6.0	6.0	4.0	8.0	6.5	10.5	6.0
23	14.5	13.0	7.5	6.5	6.0	5.5	6.0	4.5	7.0	5.5	10.5	7.0
24	14.0	13.5	9.0	7.5	6.5	5.5	6.0	5.0	9.0	6.5	10.5	6.5
25	13.5	11.0	8.0	6.5	6.5	6.0	5.5	4.5	8.5	7.0	11.5	7.5
26	13.0	10.5	7.0	6.5	6.5	5.5	4.5	3.5	10.0	8.5	10.5	7.5
27	13.5	12.0	7.0	5.5	5.5	4.5	5.0	3.5	9.5	8.5	11.0	7.5
28	13.0	11.5	7.0	5.0	5.0	4.0	3.5	2.0	9.0	7.5	11.0	7.0
29	12.0	11.0	7.0	6.0	6.5	5.0	2.5	.5	7.5	6.5	11.0	7.5
30	12.5	11.0	7.5	6.0	7.5	6.0	2.0	.5	---	---	11.5	7.5
31	13.5	11.5	---	---	7.5	7.0	3.5	2.0	---	---	9.0	7.5
MONTH	20.5	10.5	12.5	5.0	9.0	4.0	8.5	.5	10.0	3.5	11.5	5.5

14369500 APPLEGATE RIVER NEAR WILDERVILLE, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.5	7.0	14.5	9.5	16.5	14.5	23.0	17.5	26.0	21.5	22.0	19.0
2	11.5	6.5	15.0	10.5	14.5	12.5	22.5	18.5	26.5	21.0	22.5	19.5
3	9.5	7.5	16.0	10.5	14.5	11.5	20.0	17.0	26.0	21.5	22.5	18.5
4	9.0	7.5	16.0	12.0	15.0	11.5	19.0	16.5	25.5	21.0	22.0	18.5
5	11.0	8.0	15.5	12.0	16.0	12.0	20.5	17.5	24.5	20.5	23.5	19.0
6	9.5	7.5	14.5	11.0	15.0	12.5	22.5	17.5	24.5	20.0	23.0	19.0
7	9.0	7.0	15.0	9.5	17.0	13.0	24.0	18.5	24.5	20.0	23.0	19.0
8	10.0	7.0	13.0	11.0	18.0	14.0	23.5	19.0	24.5	21.5	22.0	18.0
9	11.5	8.5	11.5	9.5	19.5	14.0	21.0	19.0	25.5	21.0	23.0	18.5
10	12.0	8.0	10.0	9.0	19.5	14.5	23.0	17.0	26.0	21.5	23.0	19.5
11	12.0	7.5	11.0	8.0	17.0	15.0	23.5	18.0	25.0	21.0	22.0	18.5
12	13.5	8.5	13.5	9.5	16.5	13.5	23.5	18.5	25.5	21.5	20.5	19.0
13	13.0	9.5	12.0	11.0	16.0	14.0	24.0	18.0	25.5	21.5	19.0	16.5
14	11.5	9.5	14.0	10.0	17.0	12.5	24.5	19.5	25.5	21.5	17.5	14.5
15	13.0	9.0	15.0	10.0	19.0	12.5	25.5	19.0	24.0	21.0	18.5	15.0
16	14.0	9.0	16.5	11.0	17.5	15.0	26.0	20.0	24.0	21.0	20.0	16.5
17	13.5	10.0	17.0	11.5	19.0	14.5	25.5	20.0	24.5	20.5	19.5	17.0
18	13.5	9.5	17.0	12.0	20.0	14.5	24.5	19.5	24.0	20.5	19.5	18.0
19	14.0	10.5	18.5	13.0	20.5	15.5	25.0	19.5	23.0	19.0	18.0	16.5
20	12.5	8.5	19.0	14.0	21.5	16.5	26.0	20.0	24.0	20.0	18.5	17.0
21	8.5	7.0	16.5	14.0	20.5	16.0	26.5	21.5	24.0	20.0	18.0	15.5
22	9.0	7.0	14.0	12.0	18.5	16.0	26.5	21.5	22.5	19.5	18.5	15.0
23	13.5	9.0	12.0	10.0	18.0	15.0	25.5	21.5	23.5	20.0	19.0	16.0
24	13.5	10.0	12.0	9.5	17.0	14.5	25.0	20.5	24.0	20.0	19.5	16.5
25	13.0	9.5	13.5	10.5	17.0	14.5	25.0	20.0	23.5	20.0	20.0	17.0
26	15.0	10.5	14.5	10.5	19.5	14.5	25.5	21.0	24.5	19.5	19.5	17.5
27	15.5	11.0	16.0	11.0	21.0	15.5	26.0	21.5	23.5	20.0	19.0	16.5
28	14.5	12.0	17.0	12.5	22.0	16.5	26.5	22.5	23.0	19.5	19.5	17.0
29	14.0	10.5	17.5	13.0	21.5	17.5	26.5	22.5	20.5	18.5	19.0	16.5
30	13.5	9.0	18.0	13.5	22.0	16.5	26.5	21.5	21.5	17.5	18.5	16.5
31	---	---	18.0	13.5	---	---	27.0	22.5	22.0	18.5	---	---
MONTH	15.5	6.5	19.0	8.0	22.0	11.5	27.0	16.5	26.5	17.5	23.5	14.5

14370400 ROGUE RIVER NEAR MERLIN, OR

LOCATION.--Lat 42°29'50", long 123°29'15", in SE¼ sec.26, T.35 S., R.7 W., Josephine County, Hydrologic Unit 17100310, on left bank at Robertson Bridge, 3.4 mi (5.5 km) upstream from Jumpoff Joe Creek, 3.7 mi (6.0 km) southwest of Merlin, and at mile 86.8 (139.7 km).

DRAINAGE AREA.--3,271 mi² (8,472 km²).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: February 1974 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 25.5°C Aug. 3-5, 1977; minimum, 0.0°C Jan. 9, 1977, Dec. 30, 1978, to Jan. 1, 1979, Jan. 30, 1980.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 21.5°C July 7, 8, 15, 16, 22; minimum, 0.0°C Jan. 30.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	17.0	14.0	10.5	9.5	6.5	5.5	7.0	6.5	4.0	2.0	7.5	6.5
2	16.5	13.5	10.0	9.5	7.5	6.0	7.0	6.5	5.5	4.0	8.0	6.5
3	16.5	14.5	10.0	9.0	7.5	7.5	6.5	6.0	6.5	5.5	8.5	7.5
4	17.0	15.5	10.0	9.0	7.5	7.0	6.5	6.0	6.5	6.0	8.0	7.5
5	17.0	15.5	10.5	9.0	7.0	6.5	7.0	6.5	6.0	5.5	9.0	7.0
6	17.0	16.0	10.0	9.0	6.5	6.5	7.5	7.0	6.0	5.0	9.0	7.5
7	16.5	15.0	10.0	9.0	6.5	6.0	7.0	6.0	6.0	5.0	9.0	7.0
8	16.5	14.5	9.0	8.5	6.5	6.0	6.0	5.5	5.5	4.5	9.5	7.0
9	15.5	14.0	8.5	8.0	6.5	6.0	6.0	5.5	5.0	4.5	9.0	7.0
10	15.5	14.0	8.5	8.0	6.5	5.5	5.5	4.5	6.0	4.5	9.0	7.0
11	15.5	14.0	8.0	7.5	5.5	4.0	4.5	4.0	5.5	5.5	9.0	7.5
12	15.0	13.5	7.5	6.5	4.5	3.5	7.0	4.5	5.5	5.0	7.5	6.5
13	15.5	14.0	6.5	6.0	4.5	3.5	7.5	7.0	5.5	5.0	7.0	6.0
14	14.5	13.5	6.5	6.0	4.0	3.5	7.5	7.0	5.5	5.0	7.5	7.0
15	15.0	13.5	6.5	6.0	3.5	3.5	7.0	6.0	6.5	5.5	7.0	6.0
16	14.0	13.0	7.0	6.5	3.5	3.5	6.5	6.0	7.0	6.0	7.0	5.5
17	15.0	13.0	9.0	7.0	4.0	3.5	6.5	6.0	7.5	6.5	7.0	6.0
18	13.5	12.5	8.5	8.0	5.5	4.0	6.0	4.5	7.5	7.0	7.5	6.0
19	12.5	11.0	8.0	7.0	6.5	5.5	4.5	4.0	7.0	6.5	8.5	6.0
20	11.5	10.0	7.0	6.0	7.0	6.5	4.0	4.0	7.5	6.5	8.5	7.0
21	11.0	10.0	6.0	5.5	7.0	6.5	4.0	4.0	7.5	6.0	7.5	6.5
22	10.5	10.0	6.0	5.5	6.5	5.5	4.5	4.0	7.5	6.0	8.0	6.0
23	12.0	10.5	6.5	6.0	5.5	4.5	5.0	4.0	6.5	6.0	9.0	6.5
24	11.5	11.0	7.0	6.0	5.5	5.0	5.0	4.5	7.5	6.0	9.5	6.5
25	12.0	11.0	6.5	6.0	5.5	5.0	5.0	4.0	8.0	7.0	10.0	7.0
26	12.0	10.0	6.0	5.5	5.5	5.0	4.5	3.5	9.0	8.0	10.0	8.0
27	12.0	11.0	6.0	5.0	5.0	4.5	4.5	3.0	9.0	8.5	10.0	7.5
28	11.5	10.5	5.5	5.0	4.5	4.0	3.5	2.0	9.0	8.0	10.0	7.0
29	10.5	10.0	6.0	5.0	4.5	4.0	2.0	.5	8.0	7.0	9.5	7.5
30	10.0	9.0	6.5	5.5	6.5	4.5	1.0	.0	---	---	10.0	7.5
31	11.0	9.5	---	---	6.5	6.0	2.0	1.0	---	---	8.5	7.5
MONTH	17.0	9.0	10.5	5.0	7.5	3.5	7.5	.0	9.0	2.0	10.0	5.5

14370400 ROGUE RIVER NEAR MERLIN, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.5	6.5	14.5	11.0	---	---	21.0	16.5	20.5	17.0	18.5	13.5
2	9.0	6.0	---	---	16.5	---	21.0	17.0	19.5	16.5	18.5	15.0
3	8.0	7.0	---	---	15.5	13.5	19.5	16.0	19.0	16.0	19.0	14.5
4	8.0	7.5	---	---	15.5	12.5	19.0	16.0	19.0	16.0	18.5	14.0
5	9.5	7.5	---	---	16.5	13.5	19.5	16.0	18.5	16.0	19.0	14.5
6	9.5	7.5	---	---	16.0	14.0	20.5	16.0	18.5	15.0	18.5	15.0
7	8.0	7.0	---	---	17.5	13.5	21.5	17.0	18.5	15.0	19.5	15.0
8	8.5	7.0	---	---	18.5	14.5	21.5	17.5	18.5	14.5	18.5	14.5
9	9.5	7.5	---	---	19.5	15.0	20.0	18.0	19.0	15.5	19.0	15.0
10	10.5	8.5	---	---	20.0	15.5	20.5	16.5	19.0	16.0	19.0	16.0
11	11.0	8.0	---	---	18.5	16.5	20.5	16.0	19.5	16.0	19.0	16.5
12	12.0	8.5	---	---	17.0	15.0	20.0	16.5	19.5	16.0	18.5	16.5
13	12.5	10.0	---	---	15.5	14.5	21.0	16.5	19.0	16.0	17.5	15.0
14	12.0	10.0	---	---	16.0	13.5	20.5	17.0	18.5	15.5	16.0	13.5
15	12.0	9.0	---	---	18.0	13.5	21.5	17.0	18.5	15.5	15.5	13.0
16	13.0	9.0	---	---	17.0	15.0	21.5	17.0	18.5	15.0	16.5	13.0
17	13.0	10.0	---	---	18.5	15.0	21.0	17.5	18.0	15.0	17.0	13.5
18	13.0	10.0	---	---	19.0	14.5	21.0	17.0	18.0	15.0	17.0	15.0
19	14.0	11.0	---	---	19.5	16.0	20.5	17.0	18.0	14.5	16.5	14.5
20	12.0	9.5	---	---	20.5	17.0	20.5	17.0	17.5	14.5	16.5	14.5
21	9.5	8.0	---	---	20.5	16.5	21.0	17.5	18.0	14.5	16.0	13.0
22	8.5	8.0	---	---	19.0	17.0	21.5	17.5	18.5	15.0	15.5	13.0
23	11.0	8.0	---	---	18.0	16.5	21.0	18.0	19.5	14.5	16.0	13.0
24	13.0	10.0	---	---	16.5	15.0	20.5	17.0	20.0	15.0	16.5	13.5
25	13.5	10.5	---	---	17.5	15.0	20.0	16.5	20.0	15.0	17.0	14.5
26	14.5	10.5	---	---	18.0	14.5	20.0	16.5	19.5	15.0	17.0	15.0
27	15.5	11.5	---	---	19.0	14.5	20.5	17.0	19.5	15.5	16.5	14.0
28	15.5	12.5	---	---	19.5	15.0	21.0	17.5	18.5	14.5	17.0	14.5
29	15.0	12.0	---	---	20.5	16.5	21.0	18.0	17.5	14.0	16.5	14.0
30	14.5	11.0	---	---	20.5	16.0	20.5	17.5	17.5	13.0	16.0	13.5
31	---	---	---	---	---	---	20.5	17.5	17.5	13.0	---	---
MONTH	15.5	6.0	14.5	11.0	20.5	12.5	21.5	16.0	20.5	13.0	19.5	13.0

14371500 GRAVE CREEK AT PEASE BRIDGE, NEAR PLACER, OR

LOCATION.--Lat 42°38'30", long 123°12'40", in SE¼ sec.6, T.34 S., R.4 W., Jackson County, Hydrologic Unit 17100310, on right bank 0.5 mi (0.8 km) downstream from Pease Bridge, 0.5 mi (0.8 km) upstream from Boulder Creek, 5.4 mi (8.7 km) east of Placer, and at mile 27.1 (43.6 km).

DRAINAGE AREA.--22.1 mi^2 (57.2 km^2) at measuring site 0.5 mi (0.8 km) upstream.

PERIOD OF RECORD.--October 1940 to current year. Prior to October 1945 monthly discharge only, published in WSP 1318.

REVISED RECORDS.--WSP 1738: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,354.2 ft (717.56 m) National Geodetic Vertical Datum of 1929 (Bureau of Reclamation bench mark). Prior to Aug. 4, 1955, at sites 0.5 mi (0.8 km) upstream at datum 29.9 ft (9.11 m) higher.

REMARKS.--Records good. No regulation. One small diversion above station. Prior to 1945, Columbia upper ditch diverted water about 2 mi (3 km) above station, bypassing station. Records herein are for measuring site.

AVERAGE DISCHARGE.--35 years (water years 1946-80), 58.9 ft^3/s (1.668 m^3/s), 36.19 in/yr (919 mm/yr), 42,670 acre-ft/yr (52.6 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,240 ft^3/s (177 m^3/s) Dec. 22, 1964, gage height, 11.20 ft (3.414 m), from rating curve extended above 1,200 ft^3/s (34.0 m^3/s) on basis of slope-area measurement at gage height 9.66 ft (2.944 m); minimum, 0.12 ft^3/s (0.003 m^3/s) July 15, 1970.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 850 ft^3/s (24.1 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 2	2330	1,190	33.7	5.24	1.597	Jan. 12	0900	*1,850	52.4	*6.35	1.935

Minimum, 0.55 ft^3/s (0.016 m^3/s) Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.95	37	48	342	31	96	45	31	21	8.2	1.5	1.0
2	.95	32	389	217	33	80	43	29	21	8.2	1.5	1.0
3	.91	29	508	155	91	75	43	28	23	8.8	1.5	1.0
4	.91	38	269	133	83	71	44	26	22	9.1	1.5	1.0
5	.91	77	232	170	70	67	64	24	22	7.3	1.5	.95
6	.91	61	146	167	63	63	84	23	21	6.4	1.5	.95
7	.91	44	102	124	55	57	88	23	20	6.2	1.5	.91
8	.91	34	77	96	50	52	118	23	18	5.7	1.4	.91
9	.91	27	61	81	45	47	188	28	17	5.2	1.4	.91
10	.95	23	53	72	42	43	170	31	16	5.2	1.3	.91
11	.95	20	44	81	38	43	137	37	15	5.4	1.2	.91
12	.91	17	39	1070	36	40	115	36	15	4.9	1.2	.91
13	.95	15	34	1160	34	70	105	32	17	4.3	1.2	.91
14	2.1	13	31	825	31	368	96	31	16	4.1	1.2	.86
15	3.5	12	28	432	29	200	80	29	15	3.9	1.2	.86
16	2.1	23	26	351	29	133	71	25	14	3.5	1.2	.82
17	1.7	57	24	304	43	112	66	23	14	3.4	1.2	.82
18	3.7	75	24	210	227	103	59	22	13	3.4	1.2	.82
19	23	66	38	153	269	96	55	21	12	3.5	1.2	.86
20	55	54	55	117	197	94	61	19	11	3.4	1.2	.91
21	33	43	174	94	142	84	68	18	11	3.0	1.2	.95
22	29	108	129	79	142	75	70	19	11	2.7	1.1	.95
23	47	165	105	67	139	70	71	20	11	2.3	1.1	.91
24	97	399	102	59	113	65	65	24	11	2.3	1.1	.86
25	298	225	83	53	105	61	57	29	10	2.3	1.1	.82
26	80	127	68	48	99	57	51	38	9.7	2.1	1.1	.82
27	47	85	59	44	103	53	45	33	9.1	2.1	1.1	.77
28	35	65	53	40	135	49	42	28	8.5	2.0	1.1	.77
29	29	53	49	36	115	46	37	25	8.2	1.9	1.1	.65
30	36	48	90	34	---	45	34	23	8.2	1.8	1.0	.61
31	44	---	463	32	---	46	---	22	---	1.6	1.0	---
TOTAL	878.13	2072	3603	6846	2589	2561	2272	820	440.7	134.2	38.6	26.33
MEAN	28.3	69.1	116	221	89.3	82.6	75.7	26.5	14.7	4.33	1.25	.88
MAX	298	399	508	1160	269	368	188	38	23	9.1	1.5	1.0
MIN	.91	12	24	32	29	40	34	18	8.2	1.6	1.0	.61
CFSM	1.28	3.13	5.25	10.0	4.04	3.74	3.43	1.20	.67	.20	.06	.04
IN.	1.48	3.49	6.06	11.52	4.36	4.31	3.82	1.38	.74	.23	.06	.04
AC-FT	1740	4110	7150	13580	5140	5080	4510	1630	874	266	77	52

CAL YR 1979	TOTAL 19885.58	MEAN 54.5	MAX 653	MIN .91	CFSM 2.47	IN 33.47	AC-FT 39440		
WTR YR 1980	TOTAL 22280.96	MEAN 60.9	MAX 1160	MIN .61	CFSM 2.76	IN 37.50	AC-FT 44190		

14372250 ROGUE RIVER AT MARIAL, OR

LOCATION.--Lat 42°42'50", long 123°53'10", in NW¼SE¼ sec.9, T.33 S., R.10 W., Curry County, Hydrologic Unit 17100310, on right bank 0.2 mi (0.3 km) downstream from Mule Creek and at mile 48.2 (77.6 km).

DRAINAGE AREA.--3,812 mi² (9,873 km²).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: June 1974 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 27.5°C Aug. 5, 1977; minimum, 1.0°C Jan. 1, 2, 1979.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 24.5°C July 21, 28, 30; minimum not determined; minimum recorded, 5.0°C Dec. 13-17.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	17.0	16.5	11.5	11.0	8.0	7.5	8.5	8.5				
2	17.0	16.0	11.5	11.0	9.0	7.5	9.0	8.5				
3	17.5	16.0	11.5	11.0	9.5	9.0	8.5	8.0				
4	18.0	16.0	11.0	11.0	9.0	9.0	8.5	8.0				
5	18.0	16.5	11.0	10.5	9.0	8.5	8.5	8.0				
6	18.0	17.0	11.5	11.0	8.5	8.0	8.5	8.5				
7	18.0	17.0	11.0	10.5	8.0	8.0	8.5	8.0				
8	17.5	16.5	10.5	10.0	8.0	8.0	8.0	7.5				
9	17.0	16.0	10.0	9.5	8.0	8.0	7.5	7.0				
10	17.0	16.0	9.5	9.0	8.0	7.5	7.0	6.0				
11	16.5	15.5	9.0	9.0	7.5	6.5	6.0	6.0				
12	16.5	15.5	9.0	8.5	6.5	5.5	---	---				
13	16.5	15.5	8.5	8.0	5.5	5.0	---	---				
14	16.0	15.5	8.0	7.5	5.5	5.0	---	---				
15	16.0	15.5	7.5	7.5	5.0	5.0	---	---				
16	16.0	15.0	8.0	7.5	5.0	5.0	---	---				
17	16.0	14.5	9.0	8.0	5.5	5.0	---	---				
18	15.0	14.5	9.5	9.0	6.5	5.5	---	---				
19	14.5	13.0	9.0	8.5	8.0	6.5	---	---				
20	13.0	12.0	8.5	7.5	8.5	8.0	---	---				
21	12.0	11.5	7.5	7.0	8.5	8.0	---	---				
22	12.0	11.5	7.5	7.0	8.0	7.5	---	---				
23	12.0	11.5	7.5	7.5	7.5	6.5	---	---				
24	13.0	12.0	8.5	7.5	7.0	6.5	---	---				
25	12.5	12.0	8.5	8.0	7.5	7.0	---	---				
26	12.5	12.0	8.0	7.0	7.5	7.0	---	---				
27	12.5	12.0	7.0	6.5	7.0	6.5	---	---				
28	12.5	12.0	7.0	6.5	6.5	6.0	---	---				
29	12.0	11.0	7.0	6.5	6.0	6.0	---	---				
30	11.0	11.0	7.5	7.0	7.5	6.0	---	---				
31	11.5	11.0	---	---	8.5	7.5	---	---				
MONTH	18.0	11.0	11.5	6.5	9.5	5.0	9.0	6.0				

14372250 ROGUE RIVER AT MARIAL, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	14.0	13.5	17.5	16.5	21.5	18.5	22.5	20.5	18.5	17.5
2	---	---	14.5	13.5	17.0	16.0	21.5	19.5	22.0	20.0	19.0	17.5
3	---	---	15.5	13.5	16.5	15.0	20.5	19.0	21.5	19.5	19.0	18.5
4	---	---	16.0	14.5	15.5	14.5	19.5	18.0	21.0	19.0	19.0	18.5
5	---	---	16.0	15.0	16.0	14.0	19.5	18.0	20.5	19.0	19.0	18.5
6	---	---	16.0	14.5	16.0	15.0	20.0	18.0	20.0	18.5	19.0	18.5
7	---	---	15.0	14.0	16.5	15.0	21.0	19.0	20.0	18.0	19.5	18.5
8	---	---	14.5	13.5	17.5	15.5	21.0	19.5	20.5	18.5	19.0	18.5
9	---	---	13.5	13.0	18.5	16.5	21.0	20.0	21.0	18.5	19.0	18.5
10	10.0	---	13.0	11.0	19.0	17.0	20.5	19.5	22.0	19.0	20.5	18.5
11	10.5	10.0	11.5	11.0	18.5	17.5	21.0	19.5	21.0	19.0	21.0	18.5
12	11.0	10.5	12.5	11.0	18.0	17.0	20.5	19.5	21.0	19.0	20.0	18.5
13	12.0	11.0	13.5	12.5	17.0	16.0	20.5	19.5	21.0	19.0	19.0	17.5
14	12.0	11.0	13.0	12.5	16.0	15.5	21.5	19.5	21.0	19.0	17.5	16.5
15	12.0	11.0	14.5	12.5	17.5	15.0	21.5	20.0	20.5	18.5	17.5	16.0
16	12.5	11.5	15.5	13.5	18.0	16.0	22.0	20.5	20.5	18.5	17.5	16.5
17	12.5	12.0	17.0	14.5	18.0	16.0	22.0	20.5	20.0	18.5	17.5	16.5
18	12.5	12.0	17.5	15.5	19.5	17.5	22.5	20.5	19.5	18.5	18.0	16.5
19	13.0	12.5	17.5	15.5	20.0	17.0	22.0	20.0	19.5	17.5	18.0	17.0
20	13.5	12.0	18.5	16.5	20.0	18.0	23.5	20.0	19.5	18.0	17.5	16.5
21	12.0	9.5	18.0	17.0	20.5	18.5	24.5	20.5	19.5	17.5	17.0	16.0
22	9.5	9.0	17.0	15.5	19.5	18.5	23.0	21.0	19.5	17.5	16.5	15.5
23	11.0	9.5	15.5	14.0	19.0	18.0	23.0	21.0	19.5	18.0	17.0	16.0
24	12.0	11.0	14.0	13.0	18.0	17.0	22.5	20.5	19.5	19.0	17.0	16.0
25	12.5	12.0	13.5	12.5	17.0	16.0	22.0	20.0	20.0	19.5	18.0	16.0
26	13.5	12.5	13.5	12.5	18.0	16.0	23.5	19.5	20.0	19.5	18.5	17.0
27	14.5	13.5	15.0	13.0	19.0	16.5	23.5	20.0	20.0	19.0	18.0	17.0
28	15.0	14.5	16.0	13.5	20.0	17.5	24.5	20.5	19.5	19.0	18.0	17.0
29	14.5	14.0	17.5	15.0	20.5	18.0	23.5	21.0	19.5	18.0	18.0	17.0
30	14.0	13.5	18.0	16.0	21.0	18.5	24.5	21.0	18.5	17.5	18.0	16.5
31	---	---	18.5	16.0	---	---	23.0	21.0	18.0	17.5	---	---
MONTH	15.0	9.0	18.5	11.0	21.0	14.0	24.5	18.0	22.5	17.5	21.0	15.5

14372300 ROGUE RIVER NEAR AGNESS, OR
(National stream-quality accounting network station)

LOCATION.--Lat 42°34'50", long 124°03'30", in NE¼NW¼ sec.6, T.35 S., R.11 W., Curry County, Hydrologic Unit 17100310, on left bank 0.8 mi (1.3 km) upstream from Shasta Costa Creek, 1.5 mi (2.4 km) north of Agness, 2.6 mi (4.2 km) upstream from Illinois River, and at mile 29.7 (47.8 km).

DRAINAGE AREA.--3,939 mi² (10,202 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 113.81 ft (34.689 m) National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Public Roads).

REMARKS.--Water-discharge records good. Flow regulated since February 1977 by Lost Creek Lake (see station 14335040), slight regulation by Fish Lake and Emigrant Lake. Many diversions for irrigation and mining.

AVERAGE DISCHARGE.--20 years, 6,132 ft³/s (173.7 m³/s), 4,443,000 acre-ft/yr (5.48 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 290,000 ft³/s (8,210 m³/s) Dec. 23, 1964, from slope-area measurement; maximum gage height, 68.03 ft (20.736 m) Dec. 23, 1964, from floodmark (backwater from Illinois River); minimum discharge, 608 ft³/s (17.2 m³/s) July 9, 10, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 70,300 ft³/s (1,990 m³/s) Jan. 14, gage height, 19.78 ft (6.029 m); minimum, 923 ft³/s (26.1 m³/s) Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1490	2870	4830	21600	4480	8010	4860	5560	2600	2330	2080	1610
2	1390	2720	6670	13400	4350	7110	4850	5280	2670	2240	2050	1640
3	1160	2380	26900	9700	5480	6520	4600	5080	2760	2190	2050	1600
4	1080	2520	16400	7850	8110	7130	4520	5000	3080	2200	2080	1590
5	1000	3220	14200	7520	6390	6980	5040	4900	3050	2310	2080	1570
6	990	3920	11100	7490	5770	6360	6780	4730	3060	2360	2090	1540
7	990	4250	8350	6980	5480	6100	8270	4600	3000	2380	2070	1560
8	979	3440	7180	6190	5060	5600	7650	4420	2610	2350	2080	1570
9	1060	2640	6140	5670	4770	5240	9550	4480	2670	2280	2090	1510
10	1090	2290	5320	5750	4540	4940	11000	4620	2640	2240	2120	1230
11	1060	2130	4920	5880	4230	4810	9580	4620	2550	2260	2110	1130
12	1040	2010	4580	27000	3950	4790	8380	4580	2730	2230	2080	1170
13	1060	1940	4210	61400	3770	6140	7400	4400	3180	2190	2040	1220
14	1100	1890	3990	62600	3670	20400	7310	4050	3600	2190	2050	1290
15	1270	1860	3760	44200	3550	22800	7110	3490	3620	2160	2050	1310
16	1530	2070	3390	34100	3440	15200	6670	3110	3130	2080	2080	1340
17	1820	2690	3280	35000	3460	12000	6390	3300	2580	2130	2120	1310
18	1400	4250	3240	27900	5670	11400	6390	3390	2730	2110	2120	1310
19	1730	4790	4290	21300	13200	10400	6430	3300	2890	2190	2150	1330
20	2440	4350	5140	16000	11900	9550	6690	3190	2750	2280	2150	1410
21	2950	3580	10600	12800	10100	9260	9410	3110	2660	2290	2050	1420
22	2570	4120	11700	10800	9290	8620	9930	3110	2580	2230	1880	1410
23	2320	9780	9260	9520	10800	7910	8950	3300	2550	2150	1660	1320
24	2510	19600	13600	8790	8930	7360	7850	3630	2610	2150	1480	1240
25	8520	17700	11100	8250	7700	6780	6780	3850	2670	2170	1440	1200
26	7330	11000	8220	7780	7560	6160	6740	4010	2640	2210	1480	1150
27	4050	8620	6710	6950	7490	5820	6540	4050	2520	2230	1480	1110
28	3180	6950	5750	6450	9120	5520	6320	3600	2470	2230	1510	1100
29	2950	6100	5140	5630	9610	5080	6100	3180	2400	2210	1500	1100
30	2660	5540	7090	4710	---	4830	5840	2860	2360	2230	1580	1100
31	2860	---	16700	4560	---	4770	---	2750	---	2110	1590	---
TOTAL	67579	151220	253760	513770	191870	253590	213930	123550	83360	68910	59390	40390
MEAN	2180	5041	8186	16570	6616	8180	7131	3985	2779	2223	1916	1346
MAX	8520	19600	26900	62600	13200	22800	11000	5560	3620	2380	2150	1640
MIN	979	1860	3240	4560	3440	4770	4520	2750	2360	2080	1440	1100
AC-FT	134000	299900	503300	1019000	380600	503000	424300	245100	165300	136700	117800	80110

CAL YR 1979 TOTAL 1654259 MEAN 4532 MAX 26900 MIN 979 AC-FT 3281000
WTR YR 1980 TOTAL 2021319 MEAN 5523 MAX 62600 MIN 979 AC-FT 4009000

14372300 ROGUE RIVER NEAR AGNESS, OR--Continued
(National stream quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1961 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1960 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 26.5°C on several days in 1962, Aug. 3, 6, 9-11, 1977; minimum, 1.0°C Jan. 22-25, 1962, Dec. 9-16, 1972, Jan. 9, 10, 1977, Jan. 1-3, 1979.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum recorded, 24.0°C July 16, 17, 20-23, 28-31; minimum, 2.0°C Jan. 30.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE, WATER (DEG C)	PH FIELD (UNITS)	OXYGEN, DIS-SOLVED (MG/L)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	SILICA, DIS-SOLVED (MG/L AS SIO2)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT												
22...	1645	2390	12.0	7.6	10.7	132	370	184	23	12	5.2	6.4
NOV												
14...	0900	1900	7.7	7.2	11.8	125	41	K9	21	11	4.9	5.5
DEC												
19...	0930	4140	6.5	7.4	12.4	116	93	26	20	10	4.8	4.6
JAN												
16...	0900	33900	7.9	7.3	12.3	91	96	K28	18	7.8	3.5	3.2
FEB												
12...	1100	3830	6.5	7.4	12.0	134	K4	K6	20	12	5.3	4.5
APR												
15...	1530	7100	12.6	7.8	11.5	108	K4	<1	20	10	4.6	4.1
MAY												
14...	0800	4200	12.2	7.4	10.4	108	44	K174	20	10	4.4	4.6
JUN												
17...	1300	2390	18.8	8.2	10.4	112	100	K12	22	11	4.3	4.7
JUL												
23...	1000	2130	21.4	7.9	8.1	90	K10	277	24	7.8	3.0	4.5
AUG												
12...	1730	2050	21.8	8.3	9.6	87	K3	K131	24	7.1	2.9	4.5
SEP												
17...	1430	1350	18.0	8.2	9.9	112	K11	86	24	9.3	3.5	5.7

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
OCT												
22...	1.8	46	7.3	4.0	.0	.41	.33	.34	.070	.33	.74	.090
NOV												
14...	1.0	54	6.2	3.8	.1	.21	.27	.30	.000	.27	.57	.060
DEC												
19...	.8	46	5.3	3.1	.0	.27	.32	.98	.020	.29	1.3	.040
JAN												
16...	.8	37	2.0	1.6	.1	.91	.18	.84	.040	.19	1.1	.030
FEB												
12...	.8	53	1.2	3.2	.1	.38	.32	--	.020	.33	--	.030
APR												
15...	.9	41	1.8	1.9	.1	.29	.11	.46	.000	.06	.52	.030
MAY												
14...	.9	43	2.2	2.2	.2	.30	.06	.38	.000	.06	.44	.050
JUN												
17...	1.0	59	.9	2.0	.1	.25	.12	.39	.050	.13	.57	.050
JUL												
23...	1.8	33	2.1	2.5	.2	.41	.00	.75	.010	.36	1.1	.090
AUG												
12...	1.2	33	.3	2.2	.1	.40	.02	.37	.000	.10	.47	.080
SEP												
17...	1.5	48	1.3	3.3	.1	.38	.04	.89	.010	.04	.94	.110

14372300 ROGUE RIVER NEAR AGNESS, OR--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED (MG/L AS C)	CARBON, ORGANIC TOTAL (MG/L AS C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	TUR-BID-ITY (NTU)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT												
22...	.130	3.5	.9	--	51	5	80	89	4.5	--	--	--
NOV												
14...	.060	--	--	4.1	48	0	88	87	1.5	3	15	94
DEC												
19...	.040	--	--	.8	45	0	83	78	6.7	11	123	88
JAN												
16...	.060	3.2	2.2	--	34	0	77	60	75	270	24700	63
FEB												
12...	.040	--	--	2.5	52	0	88	80	4.9	5	52	86
APR												
15...	.070	2.3	.1	--	44	3	84	69	5.6	10	192	74
MAY												
14...	.050	--	--	5.6	43	0	80	71	3.6	7	79	95
JUN												
17...	.080	--	--	1.9	45	0	76	82	2.9	6	39	64
JUL												
23...	.090	1.7	.4	--	32	0	71	66	2.5	9	52	83
AUG												
12...	.090	--	--	--	30	0	67	62	3.7	8	44	79
SEP												
17...	.130	--	--	2.4	38	0	100	78	2.1	5	18	90

DATE	IRON, DIS-SOLVED (UG/L AS FE)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	ARSENIC DIS-SOLVED (UG/L AS AS)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)
OCT									
22...	50	370	2	30	1	1	20	200	<1
JAN									
16...	50	5900	3	140	1	1	10	100	<1
APR									
15...	20	440	2	10	0	1	20	100	1
JUL									
23...	20	250	3	20	1	1	20	<100	3

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
OCT									
22...	0	0	0	<3	2	0	9	0	4
JAN									
16...	1	0	20	<3	5	0	16	0	5
APR									
15...	1	0	0	<3	0	3	110	0	8
JUL									
23...	1	0	10	<3	0	2	6	2	4

DATE	SILVER, DIS-SOLVED (UG/L AS AG)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SELE-NIUM, TOTAL (UG/L AS SE)	NICKEL, DIS-SOLVED (UG/L AS NI)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)
OCT								
22...	0	0	4	0	0	0	0	4
JAN								
16...	C	0	4	40	0	0	3	20
APR								
15...	0	2	<3	90	0	0	6	4
JUL								
23...	C	4	<3	20	0	0	3	4

14372300 ROGUE RIVER NEAR AGNESS, OR--Continued

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	ALDRIN, TOTAL (UG/L)	LINDANE TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)
NOV 14...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AUG 12...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

DATE	METH-OXY-CHLOR, TOTAL (UG/L)	PCB TOTAL (UG/L)	MALA-THION, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	DI-AZINON, TOTAL (UG/L)	METHYL PARA-THION, TOTAL (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)	METHYL TRI-THION, TOTAL (UG/L)
NOV 14...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AUG 12...	ND	ND	ND	ND	ND	ND	--	--	--	ND	ND

14372300 ROGUE RIVER NEAR AGNESS, OR--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

DATE	FEB 12,80	APR 15,80	MAY 14,80	JUN 17,80
TIME	1100	1530	0800	1300
TOTAL CELLS/ML	560	250	650	310
DIVERSITY: DIVISION	0.4	0.0	0.6	0.5
.CLASS	0.4	0.0	0.6	0.5
..ORDER	0.9	0.0	1.0	0.9
...FAMILY	1.1	1.2	2.4	2.6
....GENUS	1.5	1.2	2.7	3.0

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)								
.CHLOROPHYCEAE								
..CHLOROCOCCALES								
...COELASTRACEAE								
....COELASTRUM	--	-	--	-	--	-	--	-
...MICRACTINIACEAE								
....MICRACTINIUM	30	5	--	-	--	-	--	-
...OOCYSTACEAE								
....ANKISTRODESMUS	5	1	--	-	--	-	--	-
....DICTYOSPHAERIUM	--	-	--	-	--	-	--	-
....OOCYSTIS	--	-	--	-	--	-	--	-
....SELENASTRUM	--	-	--	-	--	-	13	4
....TETRAEDRON	5	1	--	-	--	-	--	-
...SCENEDESMACEAE								
....CRUCIGENIA	--	-	--	-	--	-	--	-
....SCENEDESMUS	--	-	--	-	--	-	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	-	--	-	--	-	--	-
..ZYGNEMATALES								
...DESMIDIACEAE								
....EUASTRUM	--	-	--	-	--	-	--	-
CHRYSOPHYTA								
.BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCACEAE								
....COSCINODISCUS	--	-	--	-	--	-	--	-
....CYCLOTELLA	410#	73	--	-	13	2	13	4
....MELOSIRA	--	-	--	-	52	8	13	4
....THALASSIOSIRA	51	9	--	-	--	-	--	-
..PENNALES								
...ACHNANTHACEAE								
....ACHNANTHES	15	3	--	-	--	-	52#	17
....COCCONEIS	--	-	--	-	--	-	26	8
....RHOICOSPHENIA	--	-	--	-	--	-	13	4
...CYMBELLACEAE								
....CYMBELLA	5	1	--	-	13	2	--	-
...DIATOMACEAE								
....DIATOMA	--	-	--	-	190#	30	13	4
...FRAGILARIACEAE								
....ASTERIONELLA	--	-	--	-	91	14	--	-
....FRAGILARIA	30	5	--	-	--	-	--	-
....HANNAEA	--	-	13	5	--	-	--	-
....SYNEDRA	5	1	--	-	39	6	13	4
...GOMPHONEMATACEAE								
....GOMPHONEMA	--	-	--	-	--	-	--	-
...NAVICULACEAE								
....NAVICULA	--	-	91#	37	13	2	78#	25
...NITZSCHIACEAE								
....NITZSCHIA	5	1	140#	58	140#	22	65#	21
CYANOPHYTA (BLUE-GREEN ALGAE)								
.CYANOPHYCEAE								
..CHROOCOCCALES								
...CHROOCOCCACEAE								
....ANACYSTIS	--	-	--	-	--	-	13	4
..HORMOGONALES								
...NOSTOCACEAE								
....ANABAENA	--	-	--	-	91	14	--	-
....ANABAENOPSIS	--	-	--	-	--	-	--	-
...OSCILLATORIACEAE								
....LYNGBYA	--	-	--	-	--	-	--	-
....OSCILLATORIA	--	-	--	-	--	-	--	-
....PHORMIDIUM	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
e - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

14372300 ROGUE RIVER NEAR AGNESS, OR--Continued
PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

DATE	JUL 23,80	AUG 13,80	SEP 17,80
TIME	1000	0000	1430
TOTAL CELLS/ML	1300	1900	1800
DIVERSITY: DIVISION	1.4	1.0	1.1
.CLASS	1.4	1.0	1.1
..ORDER	1.7	2.0	2.1
...FAMILY	2.5	2.2	2.7
....GENUS	3.0	2.3	2.9

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)						
.CHLOROPHYCEAE						
..CHLOROCOCCALES						
...COELASTRACEAE						
....COELASTRUM	210#	16	--	-	--	-
...MICRACTINIACEAE						
....MICRACTINIUM	--	-	--	-	--	-
...OOCYSTACEAE						
....ANKISTRODESMUS	--	-	--	-	--	-
....DICTYOSPHAERIUM	--	-	13	1	--	-
....OOCYSTIS	52	4	--	-	52	3
....SELENASTRUM	--	-	13	1	--	-
....TETRAEDRON	--	-	--	-	--	-
...SCENEDESMACEAE						
....CRUCIGENIA	210#	16	--	-	--	-
....SCENEDESMUS	230#	18	160	8	150	9
..VOLVOCALES						
...CHLAMYDOMONADACEAE						
....CHLAMYDOMONAS	--	-	26	1	13	1
..ZYGNEMATALES						
...DESMIDIACEAE						
....EUASTRUM	--	-	13	1	--	-
CHRYSOPHYTA						
.BACILLARIOPHYCEAE						
..CENTRALES						
...COSCINODISCACEAE						
....COSCINODISCUS	--	-	26	1	--	-
....CYCLOTELLA	260#	20	39	2	26	1
....MELOSIRA	52	4	--	-	100	6
....THALASSIOSIRA	--	-	--	-	--	-
..PENNALES						
...ACHNANTHACEAE						
....ACHNANTHES	13	1	--	-	--	-
....COCCONEIS	--	-	--	-	26	1
....RHOICOSPHENIA	--	-	13	1	--	-
...CYMBELLACEAE						
....CYMBELLA	--	-	52	3	26	1
...DIATOMACEAE						
....DIATOMA	--	-	--	-	--	-
...FRAGILARIACEAE						
....ASTERIONELLA	--	-	--	-	--	-
....FRAGILARIA	--	-	--	-	--	-
....HANNAEA	--	-	--	-	--	-
....SYNEDRA	--	-	--	-	26	1
...GOMPHONEMATACEAE						
....GOMPHONEMA	26	2	52	3	--	-
...NAVICULACEAE						
....NAVICULA	26	2	65	3	90	5
...NITZSCHIACEAE						
....NITZSCHIA	39	3	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)						
.CYANOPHYCEAE						
..CHROOCOCCALES						
...CHROOCOCCACEAE						
....ANACYSTIS	--	-	650#	33	660#	37
..HORMOGONALES						
...NOSTOCACEAE						
....ANABAENA	--	-	--	-	--	-
....ANABAENOPSIS	--	-	--	-	310#	17
...OSCILLATORIACEAE						
....LYNGBYA	--	-	--	-	210	12
....OSCILLATORIA	180	14	930#	43	--	-
....PHORMIDIUM	--	-	--	-	100	6

NOTE: # - DOMINANT ORGANISM: EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED: LESS THAN 1/2%

14372300 ROGUE RIVER NEAR AGNESS, OR--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	18.5	16.5	12.0	11.5	8.0	7.5	9.0	8.5	4.5	3.0	9.5	9.0
2	18.5	16.5	12.0	11.5	9.0	8.0	9.0	9.0	6.0	4.5	9.0	8.5
3	18.0	16.5	12.0	11.5	9.5	9.0	9.0	8.5	7.0	6.0	10.0	9.0
4	18.5	17.0	11.5	11.0	9.5	9.0	8.5	8.5	8.0	7.0	10.0	9.5
5	19.0	16.5	11.5	11.0	9.0	8.5	8.5	8.5	8.0	7.5	10.0	9.5
6	19.0	17.0	11.5	11.0	8.5	8.0	9.0	8.5	7.5	7.5	10.0	9.5
7	19.0	17.0	11.5	11.0	8.0	8.0	8.5	8.0	8.0	7.0	10.0	9.0
8	19.0	17.0	11.0	10.5	8.0	8.0	8.0	7.5	7.0	6.5	10.0	9.0
9	18.5	16.5	11.0	10.0	8.0	8.0	7.5	7.5	7.0	6.5	10.5	9.0
10	18.0	16.5	10.0	9.5	8.0	7.5	7.5	6.5	7.0	6.5	10.0	9.5
11	18.0	16.0	10.0	9.0	7.5	6.5	7.0	6.0	7.5	6.5	9.5	9.5
12	17.5	16.0	9.5	8.5	6.5	6.0	9.0	7.0	7.5	6.5	9.5	9.0
13	17.5	16.0	9.0	8.0	6.0	5.5	9.5	9.0	7.5	6.5	9.0	8.5
14	17.0	16.0	8.5	7.5	5.5	5.5	9.5	9.0	7.0	6.5	8.5	8.5
15	17.0	16.0	8.0	7.5	5.5	5.0	9.0	8.5	7.5	6.5	8.5	7.5
16	16.5	15.5	8.5	7.5	5.0	5.0	8.5	8.0	8.0	7.0	8.0	7.5
17	16.5	15.0	9.0	8.0	6.0	5.0	8.5	8.0	8.5	8.0	8.0	7.5
18	15.0	14.5	9.0	8.5	6.5	5.5	8.0	6.5	9.5	8.5	8.5	7.5
19	14.5	14.0	9.0	8.5	8.0	6.5	6.5	5.5	9.0	8.5	9.0	8.0
20	14.0	12.5	8.5	8.0	8.5	8.0	5.5	5.5	9.0	8.5	9.5	8.5
21	12.5	12.0	8.0	7.5	8.5	8.5	5.5	5.5	8.5	8.0	9.0	8.5
22	12.0	11.5	7.5	7.0	8.5	7.5	6.0	5.5	8.5	8.0	9.5	8.5
23	12.5	12.0	8.0	7.5	7.5	7.0	6.5	6.0	8.5	8.0	10.0	8.5
24	13.0	12.0	9.0	8.0	7.0	6.5	6.5	6.0	9.0	8.0	10.0	8.5
25	13.0	12.5	8.5	8.0	7.5	7.0	6.5	6.0	9.5	8.5	10.5	9.0
26	12.5	12.0	8.0	7.5	7.5	7.0	6.0	5.5	10.0	9.5	10.5	9.0
27	13.0	12.0	7.5	7.0	7.0	6.5	5.5	4.5	10.5	10.0	11.0	9.5
28	12.5	12.0	7.0	6.5	6.5	6.0	4.5	3.5	10.5	10.0	11.0	9.0
29	12.5	12.0	7.0	6.5	6.5	6.0	4.0	2.5	10.0	9.0	10.5	9.5
30	11.5	11.5	8.0	7.0	7.5	6.0	2.5	2.0	---	---	10.5	9.5
31	12.0	11.0	---	---	8.5	7.5	3.0	2.5	---	---	10.0	9.5
MONTH	19.0	11.0	12.0	6.5	9.5	5.0	9.5	2.0	10.5	3.0	11.0	7.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.5	9.0	16.0	13.5	18.5	17.0	22.0	20.0	23.5	21.5	20.0	17.0
2	10.0	8.5	16.0	13.5	17.0	16.5	22.5	20.0	23.0	21.0	19.5	17.5
3	9.0	8.5	16.0	13.5	16.5	16.0	21.0	19.5	22.5	20.5	21.0	17.5
4	9.5	9.0	16.5	14.5	16.5	15.5	20.0	18.5	22.0	20.0	20.5	18.0
5	9.5	9.0	16.5	15.0	16.0	15.0	21.0	18.5	21.5	19.5	21.0	18.0
6	9.5	8.5	16.5	15.0	16.0	15.5	21.0	19.0	21.5	19.5	20.0	18.0
7	9.5	8.5	16.0	14.0	16.5	15.5	22.0	19.5	21.5	19.0	21.0	18.5
8	9.0	8.5	15.0	14.0	18.0	16.0	22.0	20.0	21.5	19.0	20.5	18.0
9	9.5	9.0	14.0	13.0	19.0	17.0	22.0	20.0	22.0	19.5	21.0	18.5
10	10.5	9.0	13.5	12.0	19.5	18.0	22.5	19.5	22.0	20.0	20.5	18.5
11	11.0	10.0	12.5	11.5	19.0	17.5	22.5	20.0	22.5	20.0	21.0	19.0
12	12.0	10.5	13.0	11.5	18.0	17.5	22.5	20.0	22.0	20.0	21.5	19.0
13	13.0	11.0	14.0	12.5	17.5	17.0	22.5	20.0	22.0	20.0	19.0	17.5
14	12.0	11.5	14.0	12.5	17.0	16.0	23.0	20.5	22.0	20.0	19.0	17.5
15	13.0	11.0	15.0	12.5	18.5	15.5	23.5	21.0	21.5	19.5	18.5	16.5
16	13.5	11.5	16.0	13.5	18.5	17.0	24.0	21.5	21.5	19.5	18.5	16.5
17	13.5	12.0	17.0	14.5	19.5	17.5	24.0	21.0	21.0	19.5	18.5	16.5
18	14.0	12.0	18.0	15.5	20.5	17.5	23.5	21.0	20.5	19.0	17.5	16.5
19	14.0	12.5	18.5	16.0	20.0	18.5	23.5	21.0	20.5	18.5	18.0	17.0
20	13.5	12.5	19.0	17.0	21.0	19.0	24.0	21.0	20.5	18.5	18.0	17.0
21	12.5	10.0	18.5	17.5	20.5	19.5	24.0	21.5	21.0	18.5	17.5	16.5
22	10.5	10.0	17.5	16.5	20.0	19.0	24.0	21.5	20.5	18.5	17.5	16.0
23	11.0	10.0	16.5	15.0	19.0	18.5	24.0	21.5	21.0	18.5	17.5	15.5
24	13.0	11.0	15.0	13.5	18.0	17.5	23.5	21.5	21.5	18.5	18.0	16.0
25	14.0	12.0	13.5	13.0	17.5	16.5	23.5	21.5	21.5	18.5	18.0	16.5
26	15.0	12.5	14.5	13.0	19.0	16.5	23.5	21.0	21.0	19.0	18.5	17.0
27	16.0	13.5	15.5	13.5	20.0	17.0	23.5	21.0	21.0	19.0	18.0	17.0
28	16.5	14.5	16.5	14.5	21.0	18.5	24.0	21.5	21.0	18.5	19.0	17.5
29	16.0	14.0	17.5	15.0	21.0	19.0	24.0	22.0	20.5	18.5	18.5	17.0
30	16.0	13.5	18.5	16.5	22.0	19.0	24.0	22.0	20.0	17.5	19.0	17.0
31	---	---	19.0	17.0	---	---	24.0	22.0	20.0	17.5	---	---
MONTH	16.5	8.5	19.0	11.5	22.0	15.0	24.0	18.5	23.5	17.5	21.5	15.

14372500 EAST FORK ILLINOIS RIVER NEAR TAKILMA, OR

LOCATION.--Lat 42°00'10", long 123°37'30", in SE¼NE¼ sec.15, T.41 S., R.8 W., Josephine County, Hydrologic Unit 17100311, Skskiyou National Forest, on right bank 0.3 mi (0.5 km) downstream from Dunn Creek (California-Oregon State line), 3.4 mi (5.5 km) south of Takilma, and at mile 71.2 (114.6 km).

DRAINAGE AREA.--42.3 mi² (109.6 km²).

PERIOD OF RECORD.--April to September 1926, April 1927 to April 1932, October 1940 to current year. Monthly discharge only for some periods, published in WSP 1318. Records prior to 1942 water year not equivalent owing to large diversions.

REVISED RECORDS.--WSP 1184: 1948. WSP 1288: 1951(P). WSP 1398: 1946, 1947(M), 1949. WSP 1738: Drainage area (former site).

GAGE.--Water-stage recorder. Altitude of gage is 1,780 ft (543 m), from topographic map. Prior to Oct. 31, 1946, nonrecording gage at sites 0.6 mi (1.0 km) downstream at different datums. Oct. 31, 1946, to May 13, 1949, nonrecording gage and May 14, 1949, to Aug. 23, 1965, water-stage recorder at site 0.6 mi (1.0 km) downstream at datum 1,746.6 ft (532.36 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for period of no gage-height record Jan. 8 to Feb. 4, which are fair. No regulation. Two small diversions for irrigation above station.

AVERAGE DISCHARGE.--39 years (water years 1942-80), 178 ft³/s (5.041 m³/s), 57.15 in/yr (1,452 mm/yr), 129,000 acre-ft/yr (159 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,700 ft³/s (445 m³/s) Dec. 22, 1964, gage height, 14.90 ft (4.542 m), present site and datum, from floodmark, from rating curve extended above 4,400 ft³/s (125 m³/s) on basis of slope-area measurement of peak flow; minimum, 4.6 ft³/s (0.13 m³/s) Nov. 3, 1960.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,500 ft³/s (70.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 24	0630	4,420	125	8.79	2.679	Jan. 12	-	*4,910	139	*9.17	2.795

Minimum, 7.4 ft³/s (0.210 m³/s) Oct. 3-7, 10-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.7	96	135	524	94	295	126	149	66	27	14	10
2	7.7	81	826	350	100	232	118	146	65	26	15	10
3	7.7	81	747	249	400	223	113	151	61	26	15	10
4	7.4	176	392	204	300	227	131	161	59	25	15	10
5	7.4	266	287	292	260	211	232	151	56	25	14	9.9
6	7.7	244	218	341	256	189	274	133	53	24	14	9.5
7	7.7	225	181	250	216	168	230	118	50	23	14	10
8	7.7	162	155	210	189	151	227	112	51	23	14	10
9	7.7	123	137	160	166	138	444	120	51	23	13	9.9
10	7.4	99	121	180	151	128	338	107	50	23	13	9.5
11	7.4	81	109	190	138	130	256	103	48	21	12	9.2
12	7.4	67	99	2200	128	120	244	103	48	21	12	9.5
13	7.7	59	89	2300	120	455	276	104	49	20	12	14
14	12	53	81	1400	113	1270	301	104	47	19	12	11
15	16	48	73	1000	107	516	256	101	44	19	12	10
16	10	96	69	720	107	332	239	96	43	19	12	9.9
17	9.2	135	64	620	166	284	256	91	43	19	12	9.5
18	14	187	67	490	620	261	249	91	41	18	12	10
19	99	149	131	380	718	227	261	93	40	18	12	11
20	138	121	144	280	559	223	282	91	39	18	12	11
21	76	104	282	230	369	209	234	93	38	17	12	11
22	69	462	230	210	290	185	202	88	36	16	11	11
23	113	571	227	180	251	176	189	83	36	16	12	10
24	473	2230	256	160	214	164	189	75	35	16	11	9.9
25	1050	668	196	140	234	157	185	73	36	15	10	9.9
26	271	363	149	130	329	147	181	75	34	15	10	9.5
27	191	244	126	120	440	140	196	70	32	15	10	9.2
28	176	189	112	110	575	135	209	67	31	15	11	9.5
29	142	162	106	100	412	135	189	65	30	15	10	9.5
30	125	147	309	94	---	135	162	65	29	14	10	9.2
31	115	---	756	90	---	133	---	66	---	14	10	---
TOTAL	3197.8	7689	6874	13904	8022	7496	6789	3145	1341	605	378	302.6
MEAN	103	256	222	449	277	242	226	101	44.7	19.5	12.2	10.1
MAX	1050	2230	826	2300	718	1270	444	161	66	27	15	14
MIN	7.4	48	64	90	94	120	113	65	29	14	10	9.2
CFSM	2.44	6.05	5.25	10.6	6.55	5.72	5.34	2.39	1.06	.46	.29	.24
IN.	2.81	6.76	6.05	12.23	7.05	6.59	5.97	2.77	1.18	.53	.33	.27
AC-FT	6340	15250	13630	27580	15910	14870	13470	6240	2660	1200	750	600

CAL YR 1979 TOTAL 49181.8 MEAN 135 MAX 2230 MIN 7.4 CFSM 3.19 IN 43.25 AC-FT 97550
WTR YR 1980 TOTAL 59743.4 MEAN 163 MAX 2300 MIN 7.4 CFSM 3.85 IN 52.54 AC-FT 118500

14375100 SUCKER CREEK BELOW LITTLE GRAYBACK CREEK, NEAR HOLLAND, OR

LOCATION.--Lat 42°09'35", long 123°28'40", in NE¼SW¼ sec.24, T.39 S., R.7 W., Josephine County, Hydrologic Unit 17100311, on right bank 500 ft (152 m) downstream from Little Grayback Creek, 2.0 mi (3.2 km) downstream from Grayback Creek, 3.7 mi (6.0 km) northeast of Holland, and at mile 9.3 (15.0 km).

DRAINAGE AREA.--83.9 mi^2 (217.3 km^2).

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,713.92 ft (522.403 m) National Geodetic Vertical Datum of 1929 (Water and Power Resources Service bench mark).

REMARKS.--Records good. Grayback Canal and 3 small diversions from Grayback and Cave Creeks divert water for domestic use and irrigation above station. Return flow from these diversions enters creek above station.

AVERAGE DISCHARGE.--15 years, 236 ft^3/s (6.684 m^3/s), 38.20 in/yr (970 mm/yr), 171,000 acre-ft/yr (211 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,550 ft^3/s (242 m^3/s) Jan. 15, 1974, gage height, 8.20 ft (2.499 m); minimum, 12 ft^3/s (0.34 m^3/s) Oct. 20, 1974.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1940, 10.8 ft (3.292 m) on Dec. 22, 1964, from floodmark, discharge, 19,300 ft^3/s (547 m^3/s), from estimate based on slope-area measurement of peak flow at site 0.7 mi (1.1 km) upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft^3/s (42.5 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Dec. 2	1900	1,570	44.5	4.19	1.277	Jan. 13	1300	*2,860	81.0	*5.25	1.600

Minimum, 19 ft^3/s (0.54 m^3/s) Oct. 12, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	103	168	637	195	499	225	335	156	81	43	32
2	20	92	709	488	225	439	221	330	153	79	43	32
3	20	95	828	393	499	423	213	340	164	76	44	32
4	20	160	539	340	388	383	221	349	160	76	43	31
5	20	217	444	378	345	354	295	335	153	76	43	30
6	20	182	359	388	330	325	319	300	142	74	41	30
7	21	149	314	345	290	300	305	276	138	74	41	30
8	21	125	276	305	267	271	319	267	138	71	40	31
9	20	106	245	285	245	254	499	276	135	71	40	30
10	20	95	221	271	233	237	466	254	135	69	40	30
11	20	87	195	300	221	241	408	241	132	67	38	30
12	20	79	177	1730	209	225	388	237	132	64	38	30
13	20	74	160	2360	195	364	413	233	138	62	36	31
14	38	69	149	2310	182	926	455	229	138	62	36	32
15	44	67	145	1540	173	637	423	221	125	62	38	31
16	26	106	135	1160	173	466	413	213	122	60	36	30
17	24	153	128	1000	245	429	429	205	125	58	36	29
18	38	173	125	792	631	418	418	205	119	56	36	30
19	95	149	153	650	764	388	434	209	115	54	36	33
20	142	132	160	539	663	383	516	213	112	54	35	35
21	74	115	258	466	528	354	477	213	106	54	35	33
22	71	330	249	408	460	340	434	205	106	52	35	31
23	81	408	258	368	403	319	423	195	106	52	35	30
24	305	1100	305	340	359	300	413	191	103	52	33	29
25	656	599	262	314	354	285	398	186	112	50	33	29
26	195	388	225	285	393	267	398	191	101	50	33	27
27	164	290	200	262	551	249	413	182	95	48	33	26
28	153	237	182	241	676	245	423	173	89	46	33	27
29	128	209	173	225	581	237	393	164	87	46	33	27
30	128	191	309	213	---	237	354	160	87	44	33	26
31	119	---	792	200	---	233	---	160	---	43	33	---
TOTAL	2743	6280	8843	19533	10778	11028	11506	7288	3724	1883	1152	904
MEAN	88.5	209	285	630	372	356	384	235	124	60.7	37.2	30.1
MAX	656	1100	828	2360	764	926	516	349	164	81	44	35
MIN	20	67	125	200	173	225	213	160	87	43	33	26
CFSM	1.06	2.49	3.40	7.51	4.43	4.24	4.58	2.80	1.48	.72	.44	.36
IN.	1.22	2.78	3.92	8.66	4.78	4.89	5.10	3.23	1.65	.83	.51	.40
AC-FT	5440	12460	17540	38740	21380	21870	22820	14460	7390	3730	2280	1790

CAL YR 1979	TOTAL 65316	MEAN 179	MAX 1240	MIN 20	CFSM 2.13	IN 28.96	AC-FT 129600			
WTR YR 1980	TOTAL 85662	MEAN 234	MAX 2360	MIN 20	CFSM 2.79	IN 37.98	AC-FT 169900			

14375500 WEST FORK ILLINOIS RIVER BELOW ROCK CREEK, NEAR O'BRIEN, OR

LOCATION.--Lat 42°02'20", long 123°44'50", in SW¼SE¼ sec.34, T.40 S., R.9 W., Josephine County, Hydrologic Unit 17100311, Siskiyou National Forest, on left bank 0.2 mi (0.3 km) downstream from Rock Creek, 3.0 mi (4.8 km) southwest of O'Brien, and at mile 12.8 (20.6 km).

DRAINAGE AREA.--42.4 mi² (109.8 km²).

PERIOD OF RECORD.--September 1954 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,516.14 ft (462.119 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Three small diversions from Elk Creek for irrigation above station.

AVERAGE DISCHARGE.--26 years, 214 ft³/s (6.060 m³/s), 68.54 in/yr (1,741 mm/yr), 155,000 acre-ft/yr (191 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,100 ft³/s (456 m³/s) Dec. 22, 1964, gage height, 16.05 ft (4.892 m), from rating curve extended above 6,200 ft³/s (176 m³/s), on basis of slope-area measurement at gage height 14.79 ft (4.508 m); minimum, 1.5 ft³/s (0.042 m³/s) Sept. 2-4, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,500 ft³/s (70.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 24	0500	4,570	129	10.44	3.182	Jan. 12	1330	*5,240	148	*10.94	3.335
Dec. 2	1800	3,330	94.3	9.39	2.862	Mar. 14	0330	3,650	103	9.68	2.950

Minimum, 4.0 ft³/s (0.11 m³/s) Sept. 11, 12, 25.

REVISIONS.--Revised figures of discharge for the water year 1979, superseding those published in the report for 1979 are given herein. The maximum discharge for the water year 1979 has been revised to 4,990 ft³/s (141 m³/s) Jan. 11, gage height, 10.56 ft (3.219 m), superseding figure published in the report for 1979. Peak discharge for Feb. 13, 1979, has been revised to 2,550 ft³/s (72.2 m³/s), gage height, 8.41 ft (2.563 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	9.9	312	37	48	695	54	60	42	22	8.8	9.5
2	11	9.5	145	36	44	463	52	55	41	22	8.8	20
3	11	9.5	98	35	42	768	49	55	40	22	8.8	22
4	10	9.9	202	34	41	707	47	60	39	22	9.2	15
5	9.9	10	266	32	42	603	48	603	38	20	8.5	13
6	9.9	9.9	161	31	47	500	52	1280	37	20	8.5	12
7	9.9	9.9	111	30	138	403	45	1090	36	20	8.2	11
8	9.9	9.9	82	33	156	328	45	703	36	19	8.5	12
9	9.5	9.5	69	34	165	268	54	493	36	23	8.2	13
10	9.2	9.5	64	724	320	226	81	384	36	30	7.7	11
11	9.2	9.2	147	3010	729	195	214	309	35	22	7.7	10
12	8.8	9.5	147	1000	695	175	173	251	35	20	7.4	9.9
13	9.2	9.5	112	500	1870	156	195	207	35	19	6.9	9.5
14	9.9	9.5	90	394	733	143	163	177	35	18	6.9	9.2
15	10	9.9	74	315	460	165	197	156	34	17	7.1	8.5
16	11	11	64	234	500	160	525	138	39	16	7.7	8.5
17	11	11	70	186	555	145	588	121	43	14	6.9	8.5
18	10	11	64	153	856	140	340	107	42	14	7.1	8.8
19	10	74	56	130	611	134	226	94	36	13	7.9	9.2
20	9.9	94	50	114	476	124	165	84	34	12	8.5	9.2
21	10	44	47	101	450	113	128	77	31	12	8.5	8.8
22	10	34	48	90	493	101	109	70	29	11	9.5	9.2
23	10	29	60	81	619	90	113	67	28	11	8.8	9.2
24	9.9	27	72	77	555	81	80	61	27	11	8.5	8.8
25	9.9	25	67	70	507	75	75	57	25	8.5	8.2	8.8
26	10	24	61	64	682	74	70	52	24	8.5	8.2	9.5
27	9.9	22	56	60	630	75	85	49	23	8.8	7.9	9.2
28	9.5	27	50	57	1450	69	75	47	22	9.9	8.2	8.5
29	9.9	66	45	54	---	64	70	45	23	9.2	14	8.5
30	9.5	236	42	53	---	60	65	44	23	9.2	15	8.2
31	9.5	---	39	50	---	56	---	43	---	9.2	9.9	---
TOTAL	308.4	880.1	2971	7819	13914	7356	4183	7039	1004	493.3	266.0	318.5
MEAN	9.95	29.3	95.8	252	497	237	139	227	33.5	15.9	8.58	10.6
MAX	11	236	312	3010	1870	768	588	1280	43	30	15	22
MIN	8.8	9.2	39	30	41	56	45	43	22	8.5	6.9	8.2
CFSM	.24	.69	2.26	5.94	11.7	5.59	3.28	5.35	.79	.38	.20	.25
IN.	.27	.77	2.61	6.86	12.21	6.45	3.67	6.18	.88	.43	.23	.28
AC-FT	612	1750	5890	15510	27600	14590	8300	13960	1990	978	528	632

CAL YR 1978 TOTAL 60728.2 MEAN 166 MAX 3130 MIN 6.2 CFSM 3.92 IN 53.28 AC-FT 120500
WTR YR 1979 TOTAL 46552.3 MEAN 128 MAX 3010 MIN 6.9 CFSM 3.02 IN 40.84 AC-FT 92340

14375500 WEST FORK ILLINOIS RIVER BELOW ROCK CREEK, NEAR O'BRIEN, OR--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	171	149	910	66	328	124	74	32	17	6.6	5.0
2	7.4	147	1200	544	112	246	120	69	32	16	6.6	5.0
3	7.4	158	1060	378	483	229	118	66	33	16	6.6	4.8
4	7.1	378	483	290	331	246	135	63	35	17	6.3	4.6
5	7.4	562	342	298	241	214	315	60	34	17	6.3	4.6
6	7.4	369	263	298	239	182	633	58	31	16	6.3	4.6
7	7.9	292	216	256	195	153	480	54	28	16	6.6	4.8
8	8.5	221	179	216	163	132	392	53	28	15	6.3	4.6
9	8.5	177	153	207	134	115	641	88	27	16	6.3	4.6
10	8.5	147	132	229	115	103	480	79	26	16	6.0	4.4
11	8.5	126	117	342	103	107	342	68	26	14	5.8	4.2
12	8.5	112	105	3670	88	105	272	63	26	14	5.8	4.2
13	7.9	101	94	3200	79	993	221	59	28	13	5.8	4.4
14	12	88	84	2150	70	2400	208	57	28	12	5.8	5.0
15	18	80	75	1160	66	890	197	53	25	12	5.5	5.5
16	13	268	70	941	61	566	175	50	23	11	5.5	5.2
17	12	306	64	773	86	470	152	47	22	11	5.2	4.6
18	25	437	75	515	759	442	137	45	21	11	5.2	4.8
19	126	351	315	375	791	372	124	44	20	9.8	5.2	5.8
20	301	268	375	290	497	372	148	42	19	7.6	5.2	6.0
21	167	209	782	239	342	383	173	41	19	7.6	5.0	6.0
22	163	724	522	199	337	342	165	42	19	7.6	4.8	5.8
23	284	1100	607	169	312	305	145	47	20	7.6	4.8	5.2
24	497	2750	895	147	239	262	133	44	21	7.6	4.8	5.0
25	1160	804	522	130	226	230	118	44	25	7.6	4.8	4.8
26	351	466	351	115	268	206	110	44	21	7.6	4.4	4.6
27	253	328	263	105	378	191	99	40	19	7.6	4.6	4.4
28	229	256	211	92	733	170	91	38	18	7.6	4.8	4.4
29	188	211	182	80	493	154	85	36	18	7.3	4.6	4.6
30	167	179	431	72	---	143	79	35	18	7.3	4.8	4.4
31	190	---	1440	67	---	135	---	33	---	7.0	4.8	---
TOTAL	4258.4	11786	11757	18457	8007	11186	6612	1636	742	359.8	171.1	145.9
MEAN	137	393	379	595	276	361	220	52.8	24.7	11.6	5.52	4.86
MAX	1160	2750	1440	3670	791	2400	641	88	35	17	6.6	6.0
MIN	7.1	80	64	67	61	103	79	33	18	7.0	4.4	4.2
CFSM	3.23	9.27	8.94	14.0	6.51	8.51	5.19	1.25	.58	.27	.13	.12
IN.	3.74	10.34	10.31	16.19	7.02	9.81	5.80	1.44	.65	.32	.15	.13
AC-FT	8450	23380	23320	36610	15880	22190	13110	3250	1470	714	339	289

CAL YR 1979 TOTAL 70194.2 MEAN 192 MAX 3010 MIN 6.9 CFSM 4.53 IN 61.58 AC-FT 139200
WTR YR 1980 TOTAL 75118.2 MEAN 205 MAX 3670 MIN 4.2 CFSM 4.84 IN 65.90 AC-FT 149000

14377100 ILLINOIS RIVER NEAR KERBY, OR

LOCATION.--Lat 42°13'55", long 123°39'45", in SE¼SE¼ sec.29, T.38 S., R.8 W., Josephine County, Hydrologic Unit 17100311 , Siskiyou National Forest, on right bank 1.6 mi (2.6 km) upstream from Josephine Creek, 2.5 mi (4.0 km) northwest of Kerby, and at mile 50.3 (80.9 km).

DRAINAGE AREA.--380 mi² (984 km²).

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,198.8 ft (365.175 m) National Geodetic Vertical Datum of 1929. Prior to Jan. 28, 1965, water-stage recorder, and Jan. 28 to Sept. 30, 1965, nonrecording gage 700 ft (213 m) downstream at datum 2.99 ft (0.911 m) lower.

REMARKS.--Records good. No regulation. Diversions for irrigation above station.

AVERAGE DISCHARGE.--19 years, 1,288 ft³/s (36.48 m³/s), 46.03 in/yr (1,169 mm/yr), 933,200 acre-ft/yr (1.15 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 92,200 ft³/s (2,610 m³/s) Dec. 22, 1964, gage height, 45.28 ft (13.801 m), from floodmark, site and datum then in use, from rating curve extended above 30,000 ft³/s (850 m³/s) on basis of slope-area measurement of peak flow; minimum, 14 ft³/s (0.40 m³/s) Aug. 11, 13, 14, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 11,000 ft³/s (312 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 24	0930	21,900	620	23.16	7.059	Jan. 12	1630	*26,100	739	*25.28	7.705
Dec. 2	2200	15,200	430	19.25	5.867	Mar. 14	0700	17,600	498	20.70	6.309

Minimum, 18 ft³/s (0.51 m³/s) Aug. 17, 18, Sept. 6-9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	889	1180	6040	863	2940	1010	928	360	141	43	31
2	39	779	5330	3930	958	2380	935	873	353	136	44	41
3	40	786	7600	2820	3700	2190	902	859	360	128	45	25
4	39	1200	3680	2260	2820	2140	976	866	362	126	42	30
5	40	2480	2790	2280	2180	1960	1800	842	369	126	41	27
6	38	1810	2180	2480	2130	1760	3080	781	346	118	42	22
7	38	1530	1780	2070	1830	1580	2650	717	331	113	42	22
8	38	1180	1530	1770	1590	1410	2360	682	320	110	42	23
9	37	962	1320	1620	1400	1270	3860	750	310	106	41	21
10	39	826	1180	1770	1230	1160	3240	781	299	109	39	31
11	40	717	1030	1790	1130	1130	2440	705	287	106	40	32
12	39	646	931	18700	1040	1090	2070	668	279	102	34	32
13	38	587	841	19500	950	3690	1940	643	293	103	31	36
14	46	543	772	14300	880	13000	1970	635	299	96	28	38
15	58	510	713	9260	820	6240	1920	610	279	93	29	35
16	66	1130	663	7290	820	4000	1720	581	266	93	31	33
17	59	1440	616	6310	1000	3270	1670	550	258	89	36	31
18	71	1830	610	4490	1500	2990	1570	523	249	87	24	27
19	183	1740	1590	3410	3290	2540	1520	515	237	80	23	28
20	889	1350	2070	2740	4240	2460	1700	508	220	71	27	29
21	819	1100	4080	2300	3110	2420	1800	506	211	65	27	33
22	466	2740	3200	2000	2710	2160	1600	489	213	57	24	32
23	974	5010	3460	1770	2580	1970	1470	486	210	49	24	33
24	1530	14400	5230	1600	2150	1770	1390	479	197	52	28	32
25	6910	5820	3260	1440	2060	1630	1310	460	206	51	29	33
26	2330	3540	2300	1310	2520	1470	1240	472	206	47	28	35
27	1450	2470	1810	1190	3050	1360	1240	440	192	46	28	36
28	1340	1910	1500	1080	5100	1240	1240	413	178	47	29	37
29	1100	1560	1300	992	3960	1160	1180	387	171	45	28	34
30	946	1340	2630	921	---	1100	1010	373	160	43	31	33
31	954	---	7890	877	---	1060	---	369	---	44	29	---
TOTAL	20697	62825	75066	130310	61611	76540	52813	18891	8021	2679	1029	932
MEAN	668	2094	2421	4204	2125	2469	1760	609	267	86.4	33.2	31.1
MAX	6910	14400	7890	19500	5100	13000	3860	928	369	141	45	41
MIN	37	510	610	877	820	1060	902	369	160	43	23	21
CFSM	1.76	5.51	6.37	11.1	5.59	6.50	4.63	1.60	.70	.23	.09	.08
IN.	2.03	6.15	7.35	12.76	6.03	7.49	5.17	1.85	.79	.26	.10	.09
AC-FT	41050	124600	148900	258500	122200	151800	104800	37470	15910	5310	2040	1850

CAL YR 1979 TOTAL 420384 MEAN 1152 MAX 14400 MIN 34 CFSM 3.03 IN 41.15 AC-FT 833800
WTR YR 1980 TOTAL 511414 MEAN 1397 MAX 19500 MIN 21 CFSM 3.68 IN 50.06 AC-FT 1014000

14378200 ILLINOIS RIVER NEAR AGNESS, OR

LOCATION.--Lat 42°31'15", long 124°02'35", in SW¼NW¼ sec.29, T.35 S., R.11 W., Curry County, Hydrologic Unit 17100311, on right bank 0.6 mi (1.0 km) downstream from Lawson Creek, 1.4 mi (2.3 km) upstream from Fox Creek, 2.8 mi (4.5 km) southeast of Agness, and at mile 3.0 (4.8 km).

DRAINAGE AREA.--988 mi² (2,559 km²), at cable section 2.1 mi (3.4 km) downstream where all measurements are made.

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 125.86 ft (38.362 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. No regulation. Many diversions above station for irrigation, mining, and logpond operation. Records include flow of Fox Creek. All records given herein are for measuring site.

AVERAGE DISCHARGE.--20 years, 4,172 ft³/s (118.2 m³/s), 57.34 in/yr (1,456 mm/yr), 3,023,000 acre-ft/yr (3.73 km³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 225,000 ft³/s (6,370 m³/s) Dec. 22, 1964, estimated on basis of runoff ratio with station near Selma; maximum gage height, 56.91 ft (17.346 m) Dec. 22, 1964, from floodmark (backwater from Rogue River); minimum discharge, 125 ft³/s (3.54 m³/s) Sept. 14-16, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 35,000 ft³/s (991 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Nov. 24	1100	56,600	1,600	17.82	5.432	Jan. 12	1600	*85,800	1,010	*20.30	6.187
Dec. 3	0130	42,100	1,190	16.17	4.929	Mar. 14	1100	46,000	1,300	16.65	5.075

Minimum, 155 ft³/s (4.39 m³/s) Sept. 10-12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	186	2470	3360	22100	2390	7810	2940	2320	965	564	261	179
2	183	2140	10700	13500	2690	6260	2730	2170	943	558	261	175
3	183	2160	25300	9430	6350	5410	2620	2080	943	540	253	175
4	183	3080	11000	7460	6130	5090	3170	2010	943	529	249	183
5	183	6670	8080	7390	4740	4820	5470	1940	965	523	245	169
6	179	5680	6220	7300	4490	4440	9070	1860	928	489	245	169
7	179	4640	5140	6030	4020	4050	7830	1750	892	484	240	169
8	179	3620	4410	5120	3580	3650	6640	1660	856	473	236	165
9	175	2840	3860	4640	3250	3340	10200	1860	870	457	236	162
10	175	2360	3430	4670	2950	3070	9450	1880	842	457	232	162
11	172	2030	3020	5470	2720	2970	7390	1700	835	452	228	155
12	172	1780	2730	59000	2520	2950	6170	1630	828	441	224	156
13	175	1610	2490	68900	2360	7370	5580	1560	842	426	216	158
14	183	1470	2290	49400	2240	35500	5970	1520	842	421	205	162
15	245	1370	2140	30600	2110	16500	5840	1460	821	411	205	169
16	236	2250	1990	23200	2030	10200	4990	1400	773	397	201	172
17	232	3580	1880	20600	2600	8240	4670	1340	759	387	201	162
18	253	4570	1980	13300	9870	7880	4300	1280	739	382	201	165
19	987	4870	5270	9790	15200	6900	4040	1250	739	367	201	172
20	2400	4040	8680	7730	10400	6440	4350	1220	720	362	190	175
21	2440	3290	16400	6420	7680	6350	4640	1200	694	352	190	183
22	1670	6220	12300	5470	7540	5780	4250	1190	681	333	186	172
23	2650	14000	10900	4800	7710	5330	3940	1210	687	323	186	172
24	4220	39400	16200	4320	6350	4870	3620	1240	694	314	183	169
25	18500	16400	11800	3940	6050	4510	3390	1210	807	296	183	165
26	7490	9670	8290	3550	7560	4180	3160	1180	800	301	179	162
27	4350	6760	6390	3250	8650	3860	2970	1160	720	287	179	158
28	3570	5240	5220	2980	12200	3510	2880	1090	668	283	179	158
29	2950	4440	4540	2770	10200	3280	2700	1060	630	274	175	158
30	2560	3850	9260	2570	---	3110	2510	1020	600	270	175	158
31	2660	---	24500	2450	---	3050	---	987	---	266	179	---
TOTAL	59920	172500	239770	418150	166580	200720	147480	46437	24026	12419	6524	5009
MEAN	1933	5750	7735	13490	5744	6475	4916	1498	801	401	210	167
MAX	18500	39400	25300	68900	15200	35500	10200	2320	965	564	261	183
MIN	172	1370	1880	2450	2030	2950	2510	987	600	266	175	155
CFSM	1.96	5.82	7.83	13.7	5.81	6.55	4.98	1.52	.81	.41	.21	.17
IN.	2.26	6.49	9.03	15.74	6.27	7.56	5.55	1.75	.90	.47	.25	.19
AC-FT	118900	342200	475600	829400	330400	398100	292500	92110	47660	24630	12940	9940

CAL YR 1979 TOTAL 1263682 MEAN 3462 MAX 39400 MIN 172 CFSM 3.50 IN 47.58 AC-FT 2507000
WTR YR 1980 TOTAL 1499535 MEAN 4097 MAX 68900 MIN 155 CFSM 4.15 IN 56.46 AC-FT 2974000

14400000 CHETCO RIVER NEAR BROOKINGS, OR

LOCATION.--Lat 42°07'25", long 124°11'10", in SE¼ sec.12, T.40 S., R.13 W., Curry County, Hydrologic Unit 17100312, on right bank 16 ft (5 m) upstream from bridge, 0.5 mi (0.8 km) upstream from Elk Creek, 6.8 mi (10.9 km) northeast of Brookings, and at mile 10.7 (17.2 km).

DRAINAGE AREA.--271 mi^2 (702 km^2).

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 50 ft (15 m), from topographic map.

REMARKS.--Records good. No regulation or diversion above station.

AVERAGE DISCHARGE.--11 years, 2,227 ft^3/s (63.07 m^3/s), 111.60 in/yr (2,835 mm/yr), 1,613,000 acre-ft/yr (1.99 km^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 65,800 ft^3/s (1,860 m^3/s) Jan. 16, 1971, gage height, 27.45 ft (8.367 m); minimum, 45 ft^3/s (1.27 m^3/s) Oct. 21-23, 1974.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 22, 1964, reached a stage of 32.25 ft (9.830 m), from high-water mark on bridge pier, discharge, 85,400 ft^3/s (2,420 m^3/s), from rating curve extended above 45,000 ft^3/s (1,270 m^3/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 20,000 ft^3/s (566 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Nov. 24	0830	*33,300	943	*17.92	5.462	Mar. 14	0630	26,100	739	15.69	4.782
Jan. 13	1330	29,400	833	16.74	5.102						

Minimum, 61 ft^3/s (1.73 m^3/s) Sept. 13, 14, 26-28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	1890	2200	9640	953	3860	1190	1300	379	254	108	70
2	83	1630	11000	5940	1390	2880	1090	1200	369	242	104	70
3	81	1650	14000	4100	6020	2390	1050	1150	374	238	104	70
4	81	2720	6200	3110	3820	2140	1380	1130	369	234	102	69
5	81	5780	4700	3200	2780	1980	2950	1100	359	234	98	67
6	79	4590	3700	3090	2770	1900	5040	1000	350	226	98	66
7	79	3930	3000	2530	2390	1690	3880	940	340	219	94	67
8	81	2910	2600	2210	2020	1460	3230	960	335	215	94	67
9	79	2250	2200	2030	1730	1260	5460	1000	325	215	93	65
10	77	1820	1900	2100	1500	1100	4350	1050	316	212	91	65
11	75	1540	1700	2430	1330	1020	3370	960	306	202	91	63
12	75	1350	1600	23500	1190	1010	2730	880	311	199	91	65
13	75	1200	1480	27400	1070	6470	2330	840	325	193	89	62
14	83	1080	1390	22800	968	19800	2610	800	311	187	87	62
15	118	990	1300	15300	888	9350	2930	740	302	184	86	63
16	116	1560	1230	13700	839	5660	2310	700	288	178	84	65
17	93	2800	1180	11600	1350	4570	1980	660	279	173	84	63
18	121	3390	1300	7610	6250	4270	1720	630	271	167	82	66
19	1500	3170	3420	5460	7370	3670	1590	600	262	161	79	71
20	3390	2550	5980	4160	4980	3390	2140	600	258	153	79	77
21	2040	2090	11500	3240	3600	3350	2700	590	254	148	79	82
22	1590	5070	7230	2640	4100	3010	2400	580	250	143	77	73
23	2910	8500	6870	2210	4250	2690	2200	570	271	140	74	69
24	2850	22000	10400	1880	3390	2390	1900	560	288	137	73	66
25	11700	13000	7000	1630	3140	2150	1700	550	469	130	73	65
26	5000	9200	4700	1420	4030	1910	1700	550	444	128	73	62
27	3210	6400	3470	1270	5070	1730	1700	480	354	122	73	61
28	2510	4400	2710	1130	7120	1560	1650	430	311	119	71	66
29	1970	3300	2270	1030	5480	1430	1600	420	284	115	71	67
30	1730	2400	4160	938	---	1330	1450	409	266	111	70	66
31	2000	---	9780	874	---	1260	---	389	---	109	71	---
TOTAL	43962	125160	142170	190172	91788	102680	72330	23768	9620	5488	2643	2010
MEAN	1418	4172	4586	6135	3165	3312	2411	767	321	177	85.3	67.0
MAX	11700	22000	14000	27400	7370	19800	5460	1300	469	254	108	82
MIN	75	990	1180	874	839	1010	1050	389	250	109	70	61
CFSM	5.23	15.4	16.9	22.6	11.7	12.2	8.90	2.83	1.19	.65	.32	.25
IN.	6.03	17.18	19.52	26.10	12.60	14.09	9.93	3.26	1.32	.75	.36	.28
AC-FT	87200	248300	282000	377200	182100	203700	143500	47140	19080	10890	5240	3990

CAL YR 1979 TOTAL 820139 MEAN 2247 MAX 27500 MIN 75 CFSM 8.29 IN 112.58 AC-FT 1627000
WTR YR 1980 TOTAL 811791 MEAN 2218 MAX 27400 MIN 61 CFSM 8.19 IN 111.43 AC-FT 1610000

Discharge at ungaged sites

Monthly records for the following sites have been computed by routing methods described in USGS Circular 550. Circular 550 contains monthly records for these sites for water years 1928-65, including monthly flows adjusted for major upstream storage. Figures given here represent unadjusted flows, and are rated fair. Adjusted records are available from Northwest Water Resources Data Center, Portland, Oregon.

14144700 COLUMBIA RIVER AT VANCOUVER, WA.--Lat 45°37'15", long 122°40'20", in NE¼NW¼ sec.34, T.2 N., R.1 E., Clark County, Hydrologic Unit 17080001, 5.0 mi (8.0 km) upstream from Willamette River, and at mile 106.5 (171.4 km). Drainage area, 241,000 mi² (624,200 km²), approximately. Records available, monthly discharge October 1927 to current year. Daily discharge for October 1963 to September 1969, published in annual data reports for Oregon, 1965-67, 1969.

14222870 COLUMBIA RIVER AT SAINT HELENS, OR.--Lat 45°51'58", long 122°47'00", Columbia County, Hydrologic Unit 17080003, center of channel at intersection of Township (4/5N) line and Oregon-Washington boundary, 0.6 mi (1.0 km) east of Saint Helens and at mile 86.0 (138.3 km). Drainage area, 253,900 mi² (657,600 km²), approximately. Records available, monthly discharge October 1927 to current year.

14245300 COLUMBIA RIVER AT LONGVIEW, WA.--Lat 46°06'22", long 122°57'14", Cowlitz County, Hydrologic Unit 17080003, at Longview Bridge, 1.0 mi (1.6 km) south of Longview, 2.0 mi (3.2 km) downstream from Cowlitz River, and at mile 66.0 (106.2 km). Drainage area, 256,700 mi² (664,900 km²), approximately. Records available, monthly discharge October 1927 to current year.

14280000 COLUMBIA RIVER AT MOUTH, NEAR ASTORIA, OR.--Lat 46°15', long 124°05', Clatsop County, Hydrologic Unit 17080006, center of channel at river mouth, due north from original end of south jetty, 12.3 mi (19.8 km) northwest of Astoria, and at mile 0. Drainage area, 258,000 mi² (668,200 km²), approximately. Records available, monthly discharge October 1927 to current year.

MONTHLY AND ANNUAL MEAN DISCHARGE IN CUBIC FEET PER SECOND

WATER YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
						14144700 COLUMBIA RIVER AT VANCOUVER, WA							
1980	110,500	138,200	153,000	174,000	164,600	161,400	167,600	268,900	293,100	168,700	121,800	108,700	169,200
						14222870 COLUMBIA RIVER AT SAINT HELENS, OR							
1980	131,400	175,500	217,500	247,600	208,100	206,300	210,300	290,000	310,200	178,200	130,400	121,000	204,500
						14245300 COLUMBIA RIVER AT LONGVIEW, WA							
1980	138,200	183,200	239,700	293,100	222,100	219,200	221,800	299,600	317,700	181,700	133,400	125,900	214,600
						14280000 COLUMBIA RIVER AT MOUTH, NEAR ASTORIA, OR							
1980	140,600	184,800	254,900	305,600	234,700	228,300	223,800	300,300	323,600	186,500	135,000	126,500	220,300

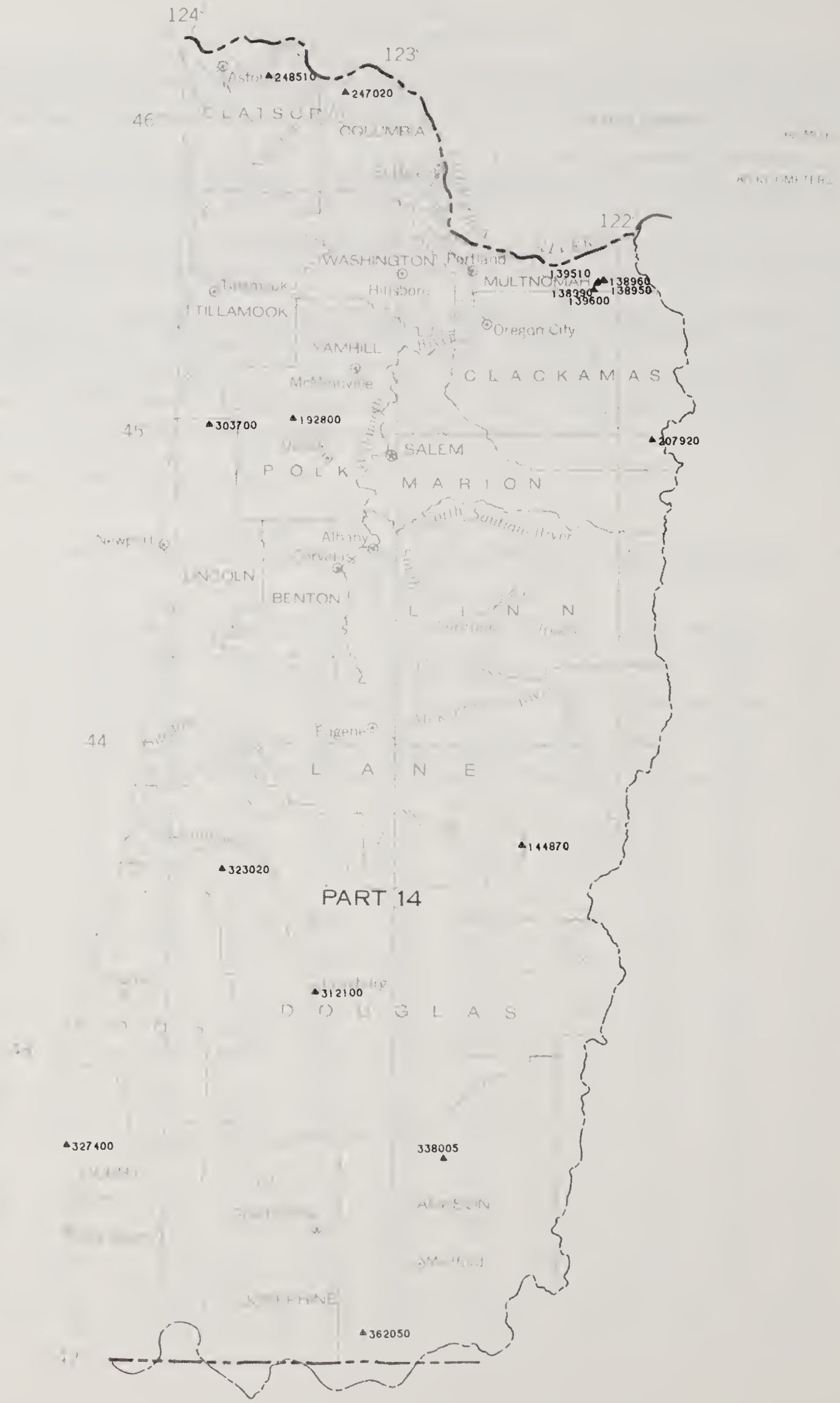


Figure 4. -- Map of Western Oregon showing location of partial-record stations

Crest-stage partial-record stations

The following table contains annual maximum discharge for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Gage height (ft)	Discharge (ft^3/s)
		SANDY RIVER BASIN					
14138950	DEER CREEK NEAR BULL RUN, OR	Lat 45°29'31", long 122°03'27", in SE¼SW¼ sec.10, T.1 S., R.6 E., Multnomah County, at culvert on Forest Service road S10, 300 ft upstream from Bull Run Reservoir Number One, and 9.6 miles northeast of Bull Run.	1.62	1978-80	12- 4-79	2.20	286
14138960	COUGAR CREEK NEAR BULL RUN, OR	Lat 45°29'28", long 122°03'40", in SW¼SW¼ sec.10, T.1 S., R.6 E., Multnomah County, at culvert on Forest Service road S10, 300 ft upstream from Bull Run Reservoir Number One, and 9.4 miles northeast of Bull Run.	3.06	1978-80	12- 4-79	3.67	226
14138990	BEAR CREEK NEAR BULL RUN, OR	Lat 45°29'18", long 122°04'58", in NW¼NW¼ sec.16, T.1 S., R.6 E., Multnomah County, at culvert on Forest Service road S10, 400 ft upstream from Bull Run Reservoir Number One, and 8.3 miles northeast of Bull Run.	1.68	1978-80	-	-	-
14139510	FIVEMILE CREEK NEAR BULL RUN, OR	Lat 45°28'57", long 122°05'25", in SW¼NE¼ sec.17, T.1 S., R.6 E., Multnomah County, at culvert on Forest Service road S10, 800 ft upstream from Bull Run Reservoir Number Two, and 7.9 miles northeast of Bull Run.	.79	1978-80	12- 4-79	1.89	49.7
14139600	CAMP CREEK NEAR BULL RUN, OR	Lat 45°27'41", long 122°06'13", in SW¼SW¼ sec.20, T.1 S., R.6 E., Multnomah County, 15 ft downstream from falls at confluence with West Branch of Camp Creek, 0.3 miles upstream from Bull Run Reservoir Number Two, and 6.6 miles northeast of Bull Run.	3.27	1978-80	1-14-80	3.54	298
		WILLAMETTE RIVER BASIN					
14144870	MIDDLE FORK WILLAMETTE RIVER TRIBUTARY NEAR OAKRIDGE, OR	Lat 43°40'20", long 122°26'00", in SW¼ sec.10, T.22 S., R.3 E., Lane County, at culvert on Rigdon Road, 400 ft upstream from flow line of Hills Creek Reservoir, and 5.0 miles south of Oakridge.	.50	1960-80	1-13-80	15.56	20
14192800	SOUTH YAMHILL RIVER TRIBUTARY NEAR WILLAMINA, OR	Lat 45°02'38", long 123°28'20", in SW¼ sec.18, T.6 S., R.6 W., Polk County, at culvert on State Highway 22, 2.2 miles upstream from mouth, and 2.5 miles south of Willamina.	1.81	1954-80	1-12-80	10.72	145
14207920	POOP CREEK NEAR BIG BOTTOM, OR	Lat 44°58'35", long 121°50'35", in SW¼ sec.9 (unsurveyed), T.7 S., R.8 E., Clackamas County, in Mt. Hood National Forest, at mouth, and 3 miles southeast of Big Bottom.	1.74	1966-80	4-29-80	11.56	a2.1
		CLATSKANIE RIVER BASIN					
14247020	FALL CREEK NEAR CLATSKANIE, OR	Lat 46°05'47", long 123°14'56", in NW¼ sec.13, T.7 N., R.5 W., Columbia County, at culvert on private road, 100 feet south of State Highway 47, 2.5 miles west of Clatskanie.	2.07	1972-80	1-12-80	10.80	108
		BIG CREEK BASIN					
14248510	LITTLE CREEK NEAR KNAPPA, OR	Lat 46°08'44", long 123°36'16", in SW¼ sec.30, T.8 N., R.7 W., Clatsop County, at culvert on Hillcrest Road, 3 miles south of Knappa.	1.53	1972-80	1-12-80	10.11	30
		SALMON RIVER BASIN					
14303700	ALDER BROOK NEAR ROSE LODGE, OR	Lat 45°01'20", long 123°51'10", in SE¼ sec.25, T.6 S., R.10 W., Lincoln County, at culvert on State Highway 18, 0.1 mile upstream from mouth, and 1.5 miles northeast of Rose Lodge.	1.09	1954-80	1-12-80	11.36	51

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Annual maximum Gage height (ft)	Annual maximum Discharge (ft^3/s)
		UMPQUA RIVER BASIN					
14312100	PARROTT CREEK AT ROSEBURG, OR	Lat 43°11'45", long 123°20'50", in NE¼ sec.25, T.27 S., R.6 W., Douglas County, at culvert on Starmer Street between Marsters and Booth Streets in Roseburg, 0.5 mile upstream from mouth.	2.42	1952-80	3-14-80	10.66	62
14323020	BUCK CREEK TRIBUTARY NEAR SCOTTSBURG, OR	Lat 43°35'30", long 123°46'00", in NE¼NE¼ sec.9, T.23 S., R.9 W., Douglas County, at culvert on Buck Creek road, at mouth, and 5 miles south of Scottsburg.	-	1971-80	1-13-80	8.78	6.7
		BRUSH CREEK BASIN					
14327400	DRY RUN CREEK NEAR PORT ORFORD, OR	Lat 42°41'20", long 124°26'00", in NW¼ sec.25, T.33 S., R.15 W., Curry County, at culvert in Humbug Mountain State Park and 5 miles southeast of Port Orford.	.86	1954-80	1-13-80	14.40	58
		ROGUE RIVER BASIN					
14338005	ROGUE RIVER TRIBUTARY NEAR TRAIL, OR	Lat 42°39'35", long 122°46'45", in E½ sec.35, T.33 S., R.1 W., Jackson County, at culvert on State Highway 62, 1.7 miles northeast of Trail.	.64	1980	1-13-80	16.03	17
14362050	KINNEY CREEK NEAR MCKEE BRIDGE, OR	Lat 42°05'35", long 123°07'40", in NW¼ sec.13, T.40 S., R.4 W., Jackson County, in Rogue River National Forest, at culvert on Forest Service road 405, 1.3 miles upstream from mouth, and 4 miles southwest of McKee Bridge.	2.83	1965-80	1-13-80	8.67	34

a Maximum observed.

Measurements of streamflow at points other than gaging stations or partial-record stations are given in the following table.

Discharge measurements at miscellaneous sites during water year 1980

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
Part 14		BULL RUN RIVER BASIN				
Deer Creek	Bull Run River	SE¼SW¼ sec.10, T.1 S., R.6 E.	1.62	1979	10-17-79	0.87
					4- 9-80	28.9
					9-25-80	2.34
Cougar Creek	.....do.....	SW¼SW¼ sec.10, T.1 S., R.6 E.	3.06	1979	10-15-79	2.57
					4- 9-80	50.0
					9-25-80	4.22
Bear Creek	.....do.....	NW¼NW¼ sec.16, T.1 S., R.6 E.	1.68	1979	10-15-79	.86
					4- 9-80	21.4
					9-25-80	1.08
Fivemile Creek	.....do.....	SW¼NE¼ sec.17, T.1 S., R.6 E.	.79	1979	10-15-79	.31
					4- 9-80	9.47
					9-25-80	.42
Camp Creek	.....do.....	SW¼SW¼ sec.20, T.1 S., R.6 E.	3.27	1979	10-18-79	6.53
					4-16-80	18.5
					9-24-80	4.17
Part 14		WILLAMETTE RIVER BASIN				
Waldo Lake Tunnel	Black Creek	Outlet to unused tunnel from Klovdahl Bay in sec.36, T.21 S., R.5½ E., (unsurveyed).	-	1937, 1940, 1943, 1945, 1948, 1950-52, 1954, 1957, 1969-71, 1973-78	10- 1-79	.63
McKenzie River	Willamette River	NW¼NE¼ sec.6, T.17 S., R.2 E.	-	1962-64, 1967-68, 1970, 1975	7-18-80	490
.....Do.....	.....do.....	NW¼NE¼ sec.26, T.17 S., R.1 W.	1,081	1952, 1954, 1956, 1958, 1960-62, 1964, 1970, 1975	7-18-80	830
Q Street floodway	.....do.....	SE¼ sec.28, T.17 S., R.3 W.	-	-	10-19-79	45.8
					12- 4-79	176
					12- 4-79	108
					12- 4-79	95.4
					4-10-80	17.9
					6-12-80	5.80
					8- 6-80	5.28

Discharge measurements at miscellaneous sites during water year 1980--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
Part 14		WILLAMETTE RIVER BASIN--Continued				
North Fork Rock Creek	Rock Creek	NE¼ sec.14, T.12 S., R.7 W.	-	1973, 1975-79	10- 2-79	1.01
South Fork Rock Creek	.....do.....	SE¼ sec.14, T.12 S., R.7 W.	-	1973, 1975-79	10- 2-79	1.89
Stillson Creek	.....do.....	SE¼ sec.13, T.12 S., R.7 W.	-	1973, 1975-79	10- 2-79	.22
Middle Fork Rock Creek	.....do.....	SE¼ sec.19, T.12 S., R.6 W.	-	1973, 1975-79	10- 2-79	.31
Griffith Creek	.....do.....	SE¼NW¼ sec.30, T.12 S., R.6 W.	-	1973, 1975-79	10- 2-79	.46
Part 14		COOS RIVER BASIN				
West Fork Millicoma River	Millicoma River	NE¼NE¼ sec.9, T.24 S., R.11 W., below Stall Falls.	-	1972-79	4-18-80	127
Part 14		ROGUE RIVER BASIN				
Dutton Creek	Castle Creek	Lat 42°53'40", long 122°10'00".	-	1967-68, 1977-79	7- 2-80 9- 2-80	2.20 .37
Castle Creek	Rogue River	Lat 42°54'45", long 122°17'00".	-	1967-68, 1977-79	7- 2-80 9- 2-80	7.65 .91
Castle Creek Tributary	Castle Creek	Lat 42°53'30", long 122°10'00".	-	1967-68, 1977-78	7- 2-80 9- 2-80	.70 0
.....Do.....	.....do.....	Lat 42°53'25", long 122°09'45".	-	1967-68, 1977-79	7- 2-80 9- 2-80	.39 0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

SANDY RIVER BASIN

452737121504400 - BULL RUN LAKE, OREG. (LAT 45 27 37 LONG 121 50 44)

DATE	TIME	TEMPERATURE, WATER (DEG C)	PH FIELD (UNITS)	SPECIFIC CONDUCTANCE (MICROMHOS)	SILICA, DISSOLVED (MG/L AS SIO2)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)
MAY										
30...	1400	5.8	5.7	17	6.5	1.4	.4	1.1	.2	6
JUN										
17...	1300	9.0	5.8	17	6.3	1.7	.5	1.1	.3	5

DATE	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)
MAY									
30...	.0	.6	.0	.60	.02	.76	.010	.15	.92
JUN									
17...	2.0	.5	.1	.23	.04	.20	.010	.04	.25

DATE	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED (MG/L AS C)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	TURBIDITY (NTU)
MAY									
30...	.000	.010	1.3	.3	5	0	14	14	.30
JUN									
17...	.010	.000	1.1	.2	6	1	15	16	1.8

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

SANDY RIVER BASIN

452737121504400 - BULL RUN LAKE, OREG. (LAT 45 27 37 LONG 121 50 44)

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BORON, DIS-SOLVED (UG/L AS B)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
MAY										
30...	1	0	5	<10	--	--	<1	0	0	0
JUN										
17...	1	1	8	<10	2	30	1	1	0	0

DATE	COBALT, DIS-SOLVED (UG/L AS CO)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
MAY									
30...	<3	0	2	7	<10	80	5	4	3
JUN									
17...	<3	0	<10	6	<10	100	<10	5	2

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SILVER, DIS-SOLVED (UG/L AS AG)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)
MAY									
30...	10	7	<10	0	0	7	30	--	--
JUN									
17...	10	3	3	0	0	3	40	20	170

DATE	LITHIUM DIS-SOLVED (UG/L AS LI)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SELE-NIUM, TOTAL (UG/L AS SE)	MERCURY DIS-SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)
MAY									
30...	--	--	0	0	--	.0	--	--	--
JUN									
17...	<4	0	0	0	.0	.0	<1	12	<6.0

ANALYSES OF WETFALL SAMPLES COLLECTED AT ATMOSPHERIC DEPOSITION SITES

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

452634122245300 - PRECIPITATION AT GRESHAM-MCKENZIE

DATE	PRECIP-ITATION DAILY (IN)	PH FIELD (UNITS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SILICA, DIS-SOLVED (MG/L AS SIO2)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SULFATE DISSOLV (UG/L)	CHLO-RIDE DISSOLV (UG/L)
MAY									
31-31	.50	6.1	--	.170	.500	<.004	<.2	2000	1000
JUN									
01-02	.50	6.1	--	.170	.500	<.004	<.2	2000	1000
06-07	.11	4.6	17	.040	.100	<.004	<.2	1000	1000
07-08	.17	4.2	31	.160	.300	<.004	<.2	3000	1000
11-13	.57	4.2	81	1.400	2.400	<.040	1.4	7000	6000
13...	.85	4.6	12	<.010	.030	<.004	<.2	1000	<10
23-25	.43	4.6	12	.020	.090	<.004	<.2	1000	<10
25-25	.43	5.3	6	<.010	.020	<.004	<.2	1000	1000
JUL									
03-04	.25	5.1	6	<.010	.080	<.040	<.2	400	600
AUG									
30-31	.30	5.1	9	.010	.200	<.004	<.2	900	400
SEP									
01-02	.62	5.0	8	.030	.200	<.040	<.2	400	260
12-13	.27	4.7	15	<.010	.200	<.004	<.2	1500	200
18...	.30	4.6	14	<.010	.080	<.004	<.2	900	200
20...	.43	5.3	9	<.010	.050	<.004	.3	800	700

DATE	FLUO-RIDE DISSOLV (UG/L)	BROMIDE DISSOLV (UG/L)	NITRO-GEN NITRATE DISSOLV (UG/L)	PHOS-PHORUS DISSOLV (UG/L)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)
MAY									
31-31	<10	<50	<10	<100	3	<1	--	<3	<10
JUN									
01-02	<10	<50	<10	<100	3	<1	--	<3	<10
06-07	<10	<50	<10	<100	<2	<1	<1	<3	<10
07-08	1000	<50	1000	<100	<2	<1	<1	<3	<10
11-13	1000	<50	<10	<100	10	<1	<1	<3	38
13...	<10	<50	<10	<100	<2	<1	<1	<3	<10
23-25	<10	<50	<10	<100	<2	<1	<1	<3	<10
25-25	<10	<50	<10	<100	<2	<1	<1	<3	<10
JUL									
03-04	40	<100	<10	<100	<2	<1	1	<3	<10
AUG									
30-31	140	<50	140	<10	4	<1	<1	<3	<10
SEP									
01-02	70	<50	60	<10	<2	<1	1	<3	<10
12-13	140	<50	160	<10	3	<1	<1	<3	<10
18...	300	<50	200	<10	<2	<1	<1	<3	<10
20...	30	<50	110	<10	<2	<1	<1	<3	<10

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	LITHIUM DIS-SOLVED (UG/L AS LI)
MAY								
31-31	<10	<10	10	13	2	<6.0	--	<4
JUN								
01-02	<10	<10	10	13	2	<6.0	--	<4
06-07	27	<10	4	11	<1	<6.0	9	<4
07-08	26	<10	3	11	<1	<6.0	10	<4
11-13	21	<10	58	<10	11	<10	14	<4
13...	<10	<10	<1	<10	<1	<6.0	<3	<4
23-25	<10	<10	4	24	<1	<6.0	<3	<4
25-25	<10	<10	<1	25	<1	<6.0	<3	<4
JUL								
03-04	<10	<10	4	16	<1	<3.0	5	<4
AUG								
30-31	15	<10	9	10	<1	<6.0	8	<4
SEP								
01-02	<10	<10	27	<10	<1	<3.0	<3	<4
12-13	44	<10	12	<10	2	<6.0	7	<4
18...	11	<10	1	<10	<1	<6.0	4	<4
20...	<10	<10	<1	<10	<1	<6.0	<3	<4

ANALYSES OF WETFALL SAMPLES COLLECTED AT ATMOSPHERIC DEPOSITION SITES

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

452650122091800 - PRECIPITATION AT BULL RUN-SMITH

DATE	PRECIP-ITATION DAILY (IN)	PH FIELD (UNITS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SILICA, DIS-SOLVED (MG/L AS SIO2)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SULFATE DISSOLV (UG/L)	CHLO-RIDE DISSOLV (UG/L)
JUN									
11-12	.14	4.2	33	.120	.200	<.004	<.2	3000	1000
12-13	1.8	4.2	33	.280	.300	.023	.2	2000	1000
13-14	.37	4.7	13	<.010	.020	<.004	<.2	1000	<10
14-15	.15	4.5	22	.020	.200	<.004	<.2	2000	1000
16-17	.31	4.4	24	.180	.300	<.004	<.2	2000	<10
24-25	.73	4.6	10	<.010	<.020	<.004	<.2	1000	<10
25-26	.25	4.5	15	<.010	.020	<.004	<.2	1000	<10
JUL									
03-04	.39	4.8	6	<.010	.020	.170	<.2	200	100
AUG									
26-27	.10	5.1	12	.030	.200	<.004	<.2	1500	1000
27-28	.12	5.7	14	.050	.400	<.004	<.2	1100	620
29-30	.17	4.9	8	<.010	.060	<.004	<.2	600	280
30-31	.84	4.6	12	<.010	.050	<.004	<.2	800	240
SEP									
01-02	.81	4.8	6	<.010	<.020	<.004	<.2	700	420
06-07	.39	5.0	14	.010	.060	<.040	<.2	1300	630
11-12	.12	4.6	15	.000	.080	<.040	<.2	--	--
12-12	.31	4.3	40	.040	.100	<.040	.4	1670	500
17-18	.37	4.6	18	<.010	.300	<.004	<.2	1300	200
18-19	.26	4.5	17	<.010	.080	<.004	<.2	1100	200
19-20	1.3	5.1	9	<.010	.060	<.004	.3	500	500
20-21	.27	4.7	31	<.010	.100	.085	1.4	1400	2500
27-28	.15	--	--	<.010	.080	<.004	<.2	400	100
29-30	.22	5.1	8	.020	.300	<.004	2.0	400	600

DATE	FLUO-RIDE DISSOLV (UG/L)	BROMIDE DISSOLV (UG/L)	NITRO-GEN NITRATE DISSOLV (UG/L)	PHOS-PHORUS DISSOLV (UG/L)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	COBALT, DIS-SOLVED (UG/L AS CO)
JUN								
11-12	<10	<50	<10	<100	<2	<1	<1	<3
12-13	<10	<50	<10	<100	<2	<1	<1	<3
13-14	<10	<50	<10	<100	<2	<1	<1	<3
14-15	<10	<50	<10	<100	<2	<1	2	<3
16-17	<10	<50	<10	<100	<2	<1	<1	<3
24-25	<10	<50	<10	<100	<2	<1	<1	<3
25-26	<10	<50	<10	<100	<2	<1	<1	<3
JUL								
03-04	60	<100	100	<100	<2	<1	<1	<3
AUG								
26-27	370	<50	180	<10	<2	<1	1	<3
27-28	190	<50	260	<10	3	<1	1	<3
29-30	110	<50	140	<10	<2	<1	<1	<3
30-31	120	<50	180	<10	<2	<1	<1	<3
SEP								
01-02	120	<50	110	<10	<2	<1	<1	<3
06-07	60	<50	170	<100	<2	<1	1	<3
11-12	--	--	--	--	<2	<1	<1	<3
12-12	80	<50	510	<100	<2	<1	2	<3
17-18	50	<50	260	<10	<2	<1	<1	<3
18-19	70	<50	280	<10	<2	<1	<1	<3
19-20	50	<50	90	<10	<2	<1	<1	<3
20-21	60	<50	150	<10	<2	<1	<1	<3
27-28	100	<50	100	<10	<2	<1	<1	<3
29-30	120	<50	140	<10	<2	<1	1	<3

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

452650122091800 - PRECIPITATION AT BULL RUN-SMITH--Continued

DATE	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	LITHIUM DIS-SOLVED (UG/L AS LI)
JUN									
11-12	<10	24	<10	7	<10	<1	<6.0	15	<4
12-13	<10	80	<10	6	<10	<1	<6.0	6	<4
13-14	<10	<10	<10	<1	<10	<1	<6.0	3	<4
14-15	<10	11	<10	3	<10	<1	<6.0	12	<4
16-17	<10	57	<10	5	<10	<1	<6.0	<3	<4
24-25	<10	<10	<10	<1	23	<1	<6.0	<3	<4
25-26	<10	<10	<10	1	45	<1	<6.0	<3	<4
JUL									
03-04	<10	<10	<10	<1	<10	<1	<3.0	<3	<4
AUG									
26-27	<10	<10	<10	27	<10	<1	<6.0	<3	<4
27-28	<10	29	<10	10	<10	1	<6.0	6	<4
29-30	<10	<10	14	3	11	<1	<6.0	5	<4
30-31	<10	<10	<10	<1	<10	<1	<6.0	<3	<4
SEP									
01-02	<10	<10	<10	1	<10	<1	<6.0	<3	<4
06-07	<10	<10	<10	3	<10	1	<3.0	5	<4
11-12	<10	24	<10	3	<10	1	<3.0	7	<4
12-12	<10	17	30	4	<10	1	5.0	10	<4
17-18	<10	<10	<10	3	<10	<1	<6.0	5	<4
18-19	<10	<10	<10	3	<10	<1	<6.0	4	<4
19-20	<10	<10	<10	<1	<10	<1	<6.0	<3	<4
20-21	<10	<10	<10	2	<10	2	<6.0	4	<4
27-28	<10	<10	<10	2	<10	<1	<6.0	5	<4
29-30	<10	<10	<10	2	<10	<1	<6.0	17	<4

ANALYSES OF WETFALL SAMPLES COLLECTED AT ATMOSPHERIC DEPOSITION SITES

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

454145123470300 - PRECIPITATION AT NEHALEM-GRIMES

DATE	PRECIP-ITATION DAILY (IN)	PH FIELD (UNITS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	SILICA, DIS-SOLVED (MG/L AS SIO2)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SULFATE DISSOLV (UG/L)	CHLO-RIDE DISSOLV (UG/L)
JUN									
16-17	.04	4.6	--	.030	.200	<.004	1.0	1000	2000
23-24	.50	4.9	4	<.010	<.020	<.004	<.2	<10	<10
JUL									
03-03	.26	5.8	10	.010	.100	<.040	<.2	600	800
04-05	.36	5.0	18	.010	.100	<.040	.4	400	1300
AUG									
08-08	--	--	--	.340	1.800	.130	1.1	--	--
16-17	.35	5.1	34	.140	1.700	<.004	.3	--	--
18...	--	--	--	--	--	--	--	1500	6000
26-27	.28	5.1	29	<.010	.400	<.004	2.4	1600	4500
29-30	.15	5.1	13	<.010	.100	<.004	1.0	800	1800
30-31	.12	4.9	15	.010	.090	<.004	.6	1300	1300
SEP									
01-02	--	--	--	--	--	--	--	100	100
06-07	.71	5.2	5	<.010	<.020	<.004	<.2	<10	100
11-12	.02	--	--	--	--	--	--	1800	3300
13-14	.24	4.6	15	<.010	.200	<.004	.4	600	1100
17-18	.12	7.0	100	.020	.200	<.004	.3	1200	670
18-19	.59	5.1	9	<.010	.030	<.004	.3	700	2000
19-20	.68	5.3	9	<.010	.100	<.004	.6	200	1300

DATE	FLUO-RIDE DISSOLV (UG/L)	BROMIDE DISSOLV (UG/L)	NITRO-GEN NITRATE DISSOLV (UG/L)	PHOS-PHORUS DISSOLV (UG/L)	BARIUM, DIS-SOLVED (UG/L AS BA)	LIUM, DIS-SOLVED (UG/L AS EE)	BERYL-CADMIUM DIS-SOLVED (UG/L AS CD)	COBALT, DIS-SOLVED (UG/L AS CO)
JUN								
16-17	<10	<50	<10	<100	<2	<1	<1	<3
23-24	<10	<50	<10	<10	<2	<1	<1	<3
JUL								
03-03	50	<100	<10	<100	<2	<1	<1	<3
04-05	40	<100	<10	<100	<2	<1	1	<3
AUG								
08-08	--	--	--	--	5	<1	3	<3
16-17	--	--	--	--	<2	<1	<1	<3
18...	90	<50	10	<10	--	--	--	--
26-27	300	<50	20	<10	<2	<1	<1	<3
29-30	100	<50	30	<10	<2	<1	<1	<3
30-31	150	<50	20	<10	<2	<1	<1	<3
SEP								
01-02	30	<50	10	<10	--	--	--	--
06-07	100	<50	<10	<10	<2	<1	<1	<3
11-12	400	<50	60	<10	--	--	--	--
13-14	170	<50	100	<10	<2	<1	<1	<3
17-18	140	<50	130	<10	<2	<1	<1	<3
18-19	310	<50	100	<10	<2	<1	<1	<3
19-20	20	<50	<10	<10	<2	<1	<1	<3

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

454145123470300 - PRECIPITATION AT NEHALEM-GRIMES--Continued

DATE	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	LITHIUM DIS-SOLVED (UG/L AS LI)
JUN									
16-17	<10	<10	<10	4	<10	<1	<6.0	29	<4
23-24	25	<10	<10	1	33	<1	<6.0	<3	<4
JUL									
03-03	<10	<10	<10	3	<10	7	<3.0	20	<4
04-05	<10	<10	16	<1	16	<1	3.0	<3	<4
AUG									
08-08	--	--	<10	42	<10	5	<6.0	30	<4
16-17	<10	34	<10	20	<10	3	<6.0	13	<4
18...	--	--	--	--	--	--	--	--	--
26-27	<10	<10	<10	2	<10	<1	<6.0	3	<4
29-30	15	<10	<10	3	<10	<1	<6.0	<3	<4
30-31	59	<10	<10	<1	<10	<1	<6.0	9	<4
SEP									
01-02	--	--	--	--	--	--	--	--	--
06-07	<10	<10	<10	<1	<10	<1	<6.0	<3	<4
11-12	--	--	--	--	--	--	--	--	--
13-14	<10	<10	<10	<1	<10	<1	<6.0	<3	<4
17-18	<10	17	<10	7	<10	<1	<6.0	3	<4
18-19	<10	<10	<10	<1	<10	<1	<6.0	<3	<4
19-20	<10	<10	<10	<1	12	<1	<6.0	<3	<4

Figure 5. -- Map of Western Oregon showing location of observation wells

CLACKAMAS COUNTY

451905122475801. Local number 3S/1W-10CCD.
LOCATION.--Lat 45°19'05", long 122°47'58", Hydrologic Unit 17090007.
Owner: Pamouskis.
AQUIFER.--Columbia River Basalt Group.
WELL CHARACTERISTICS.--Drilled domestic well, diam 6 in (150 mm), reported depth 115 ft (35 m).
DATUM.--Altitude of land surface datum is 235 ft (72 m). Measuring point: Top of casing extension, 1.45 ft (0.44 m) above datum.
PERIOD OF RECORD.--1951 to 1980.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 68.42 ft (20.85 m) below datum, May 12, 1956; lowest measured, 91.26 ft (27.82 m) below datum, Oct. 17, 1974.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 28	85.35	-	-	-	-	-	-

CLATSOP COUNTY

460733123560301. Local number 8N/10W-33CCC.
LOCATION.--Lat 46°07'33", long 123°56'03", Hydrologic Unit 17100201.
Owner: U.S. Geological Survey.
AQUIFER.--Dune sand.
WELL CHARACTERISTICS.--Drilled observation well, diam 6 in (150 mm), cased to 73 ft (22 m), screened 73 to 88 ft (22 to 27 m).
DATUM.--Land surface datum is 34.13 ft (10.40 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 1.5 ft (0.46 m) above datum.
REMARKS.--Continuous water-level recorder installed Aug. 4, 1977.
PERIOD OF RECORD.--1967-68, 1977 to current year.
EXTREMES FOR THE PERIOD OF RECORD.--Highest water level measured, 13.39 ft (4.08 m) below datum, Dec. 25, 1977; lowest measured, 16.29 ft (4.97 m) below datum, Oct 20, 1967.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 5	15.54	JAN 5	14.12	APR 5	13.81	JUL 5	14.37
OCT 10	15.58	JAN 10	14.06	APR 10	13.75	JUL 10	14.49
OCT 15	15.65	JAN 15	14.00	APR 15	13.80	JUL 15	14.54
OCT 20	15.59	JAN 20	13.90	APR 20	13.82	JUL 20	14.57
OCT 25	-	JAN 25	13.88	APR 25	13.83	JUL 25	14.62
OCT 31	15.50	JAN 31	13.88	APR 30	13.83	JUL 31	14.67
NOV 5	15.39	FEB 5	13.79	MAY 5	13.96	AUG 5	14.69
NOV 10	15.31	FEB 10	13.80	MAY 10	14.04	AUG 10	14.70
NOV 15	15.43	FEB 15	13.89	MAY 15	14.14	AUG 15	14.81
NOV 20	15.46	FEB 20	13.87	MAY 20	14.22	AUG 20	14.87
NOV 25	15.32	FEB 25	13.88	MAY 25	14.26	AUG 25	14.92
NOV 30	15.31	FEB 29	13.72	MAY 31	14.27	AUG 31	14.95
DEC 5	15.04	MAR 5	13.60	JUN 5	14.27	SEP 5	15.01
DEC 10	15.00	MAR 10	13.59	JUN 10	14.28	SEP 10	15.08
OEC 15	14.86	MAR 15	13.58	JUN 15	14.38	SEP 15	15.13
DEC 20	14.46	MAR 20	13.57	JUN 20	14.41	SEP 20	15.16
DEC 25	14.27	MAR 25	13.64	JUN 25	14.45	SEP 25	15.18
DEC 31	14.18	MAR 31	13.78	JUN 30	14.47	SEP 30	15.21

COOS COUNTY

433006124141501. Local number 24S/13W-10CAB.
LOCATION.--Lat 43°30'06", long 124°14'15", Hydrologic Unit 17100304.
Owner: Coos Bay - North Bend Water Board.
AQUIFER.--Dune sand.
WELL CHARACTERISTICS.--Drilled observation well, diam 2 in (51 mm), depth 121 ft (37 m), cased to 119 ft (36 m), screened 119 to 121 ft (36 to 37 m).
DATUM.--Land surface datum is 35.26 ft (10.75 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.20 ft (0.67 m) above datum.
REMARKS.--Locally known as well 200A.
PERIOD OF RECORD.--1963 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.20 ft (1.58 m) below datum, Feb. 6, 1969; lowest measured, 11.50 ft (3.51 m) below datum, Nov. 8, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

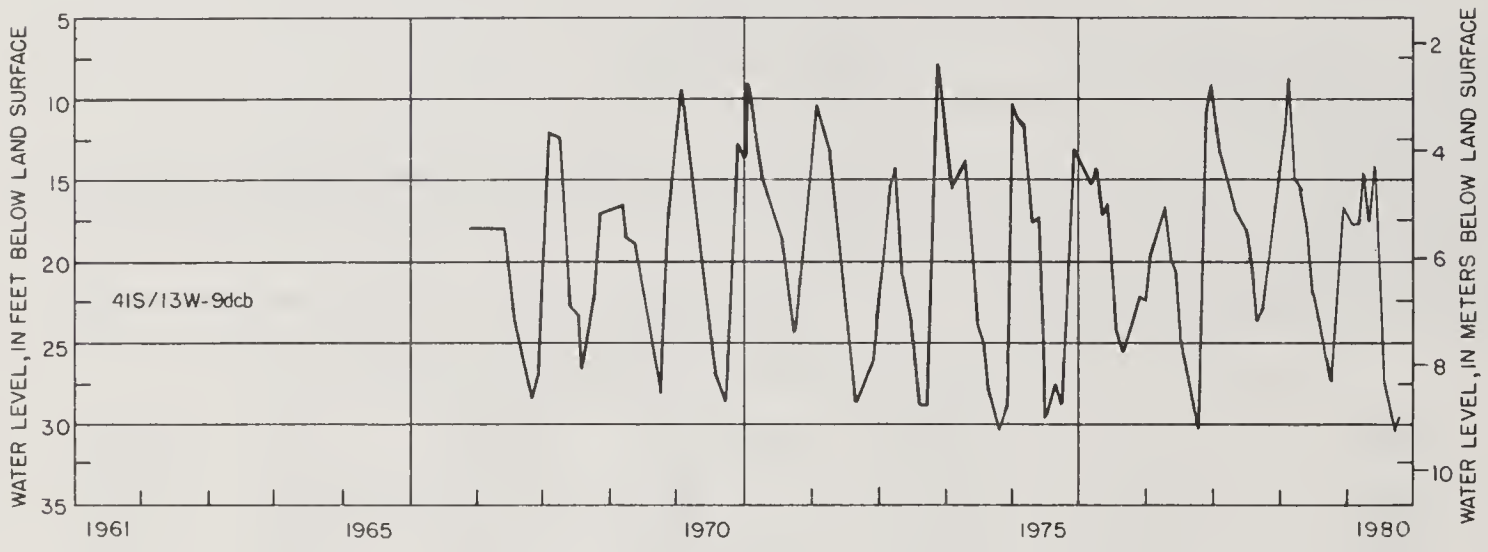
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	11.40	JAN 16	8.60	APR 10	8.60	JUL 9	9.80
NOV 7	10.70	FEB 13	9.00	MAY 7	8.70	AUG 13	10.80
DEC 7	9.50	MAR 12	9.00	JUN 11	9.20	SEP 10	12.20

CURRY COUNTY

420205124145501. Local number 41S/13W-9DCB.
LOCATION.--Lat 42°02'05", long 124°14'55", Hydrologic Unit 17100312.
Owner: Minnie Clendenin.
AQUIFER.--Sandstone and gravel.
WELL CHARACTERISTICS.--Drilled irrigation well, diam 10 in (250 mm), depth 59 ft (18 m), cased to 45 ft (14 m), perforated 30-45 ft (9-14 m).
DATUM.--Altitude of land surface datum is about 110 ft (34 m). Measuring point: Top of casing 0.9 ft (0.3 m) above datum.
PERIOD OF RECORD.--1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.42 ft (2.26 m) below datum, Jan. 30, 1970; lowest measured, 30.52 ft (9.30 m) below datum, Sept. 28, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15	27.42	FEB 21	17.44	APR 29	17.20	AUG 8	27.45
DEC 18	16.65	MAR 25	14.65	JUN 24	13.94	SEP 30	30.27
JAN 29	17.47						



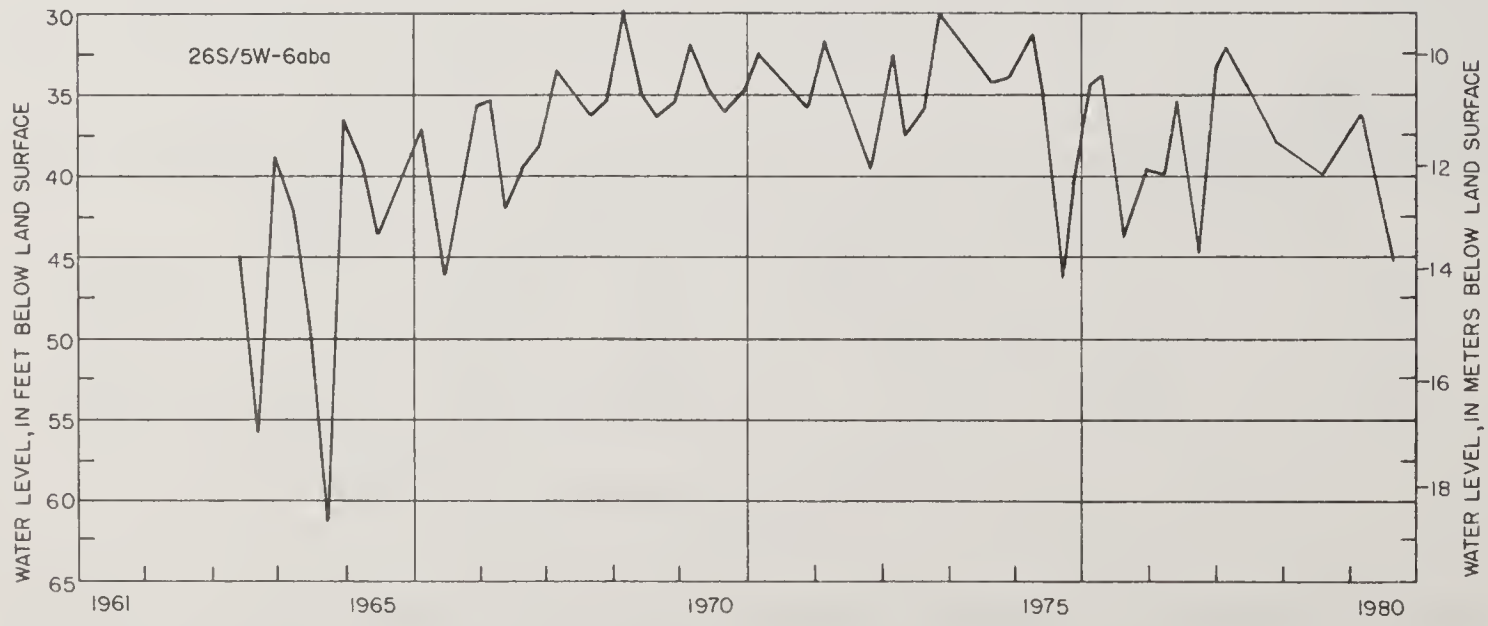
DOUGLAS COUNTY

432051123195601. Local number 26S/5W-6ABA.
LOCATION.--Lat 43°20'51", long 123°19'56", Hydrologic Unit 17100301.
Owner: Stanley Mohr.
AQUIFER.--Sandstone and siltstone.
WELL CHARACTERISTICS.--Drilled domestic well, diam 8 in (200 mm), depth 225 ft (69 m), cased to 20 ft (6 m).
DATUM.--Altitude of land surface datum is 580 ft (177 m). Measuring point: Hole in casing seal, 0.7 ft (0.21 m) above datum.
PERIOD OF RECORD.--1963 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 30.15 ft (9.19 m) below datum, Feb. 13, 1969; lowest measured, b61.19 ft (18.65 m) below datum, Sept. 10, 1964.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 11	36.19	-	-	-	-	-	-

b May be affected by recent pumping.

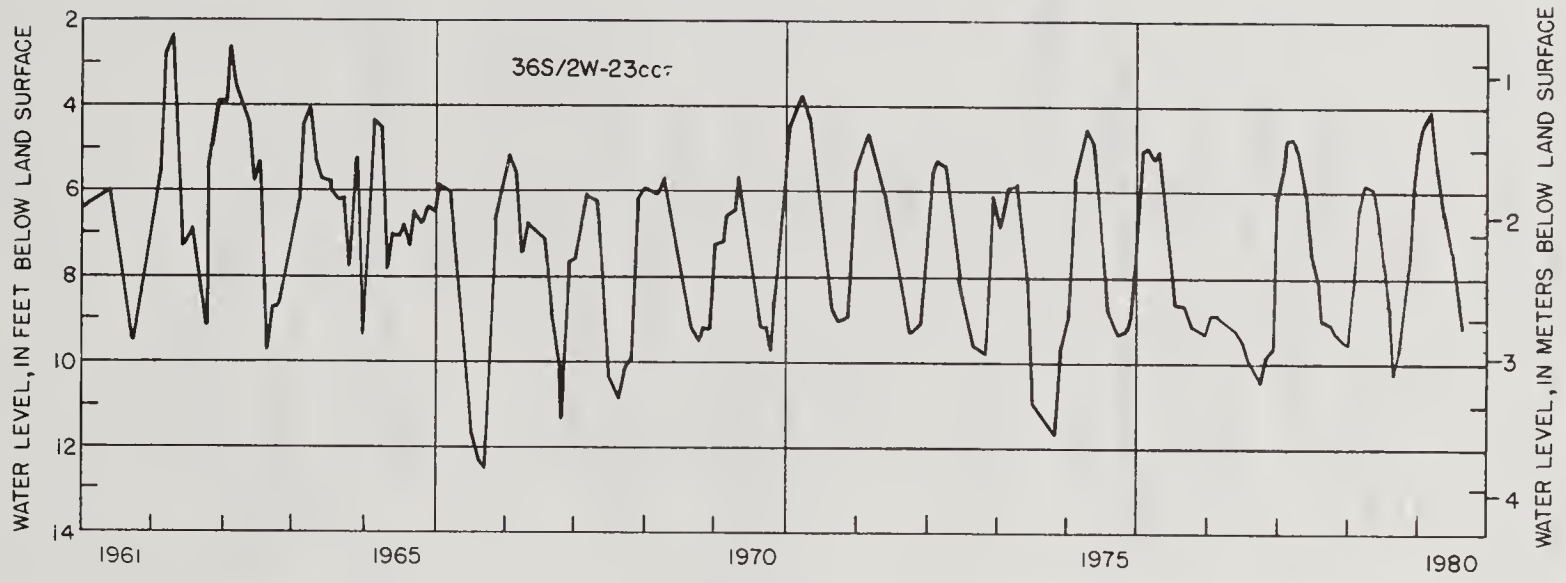


JACKSON COUNTY

422517122543401. Local number 36S/2W-23CCA.
LOCATION.--Lat 42°25'17", long 122°54'34", Hydrologic Unit 17100308.
Owner: U.S. Geological Survey.
AQUIFER.--Alluvium.
WELL CHARACTERISTICS.--Drilled observation well, diam 8 in (200 mm), depth 110 ft (33 m), cased to 106 ft (32 m).
DATUM.--Altitude of land surface datum is 1,230 ft (375 m). Measuring point: Top of casing, 2.00 ft (0.61 m) above datum.
PERIOD OF RECORD.--1953-54, 1956, 1958 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.27 ft (0.69 m) below datum, Mar. 5, 1962; lowest measured, 12.47 ft (3.80 m) below datum, Sept. 23, 1966.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20	9.69	JAN 21	4.73	APR 21	5.27	JUL 23	8.38
NOV 20	7.62	FEB 20	4.44	MAY 20	6.40	AUG 20	9.20
DEC 20	5.64	MAR 14	4.12	JUN 20	7.35	SEP 19	9.66

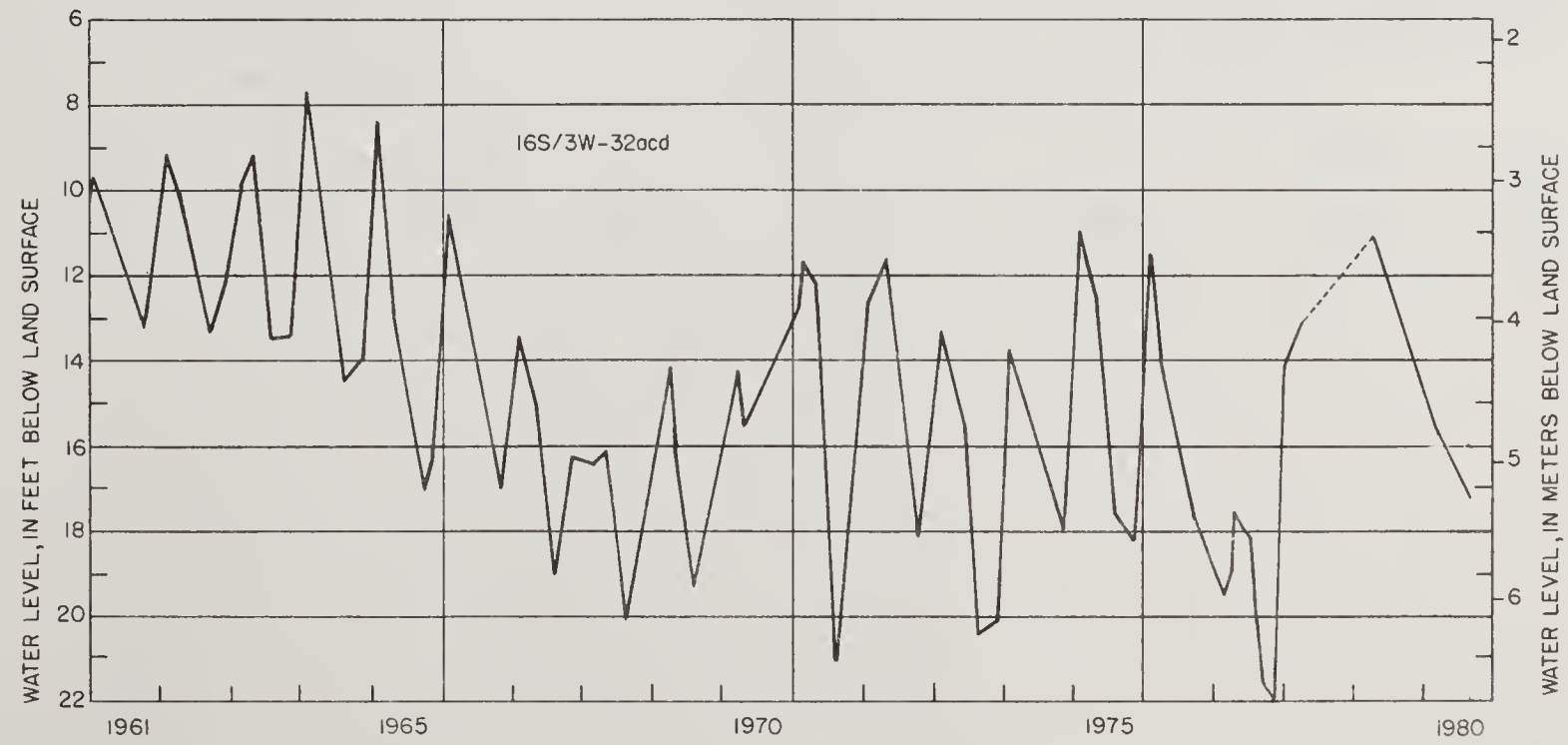


LANE COUNTY

440803123042601. Local number 16S/3W-32ACD.
LOCATION.--Lat 44°08'03", long 123°04'26", Hydrologic Unit 17090004.
Owner: Peter Gutowski.
AQUIFER.--Sand and gravel.
WELL CHARACTERISTICS.--Dug and drilled irrigation well in sand and gravel, diam 8 in (200 mm), depth 40 ft (12 m).
DATUM.--Land surface datum is 388.98 ft (118.56 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 8.00 ft (2.44 m) below datum.
REMARKS.--Continuous water-level recorder installed Feb. 16, 1977.
PERIOD OF RECORD.--1928-30, 1935-36, 1938 to current year. Published every fifth day February 20 to September 20, 1977.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.53 ft (1.99 m) below datum, Jan. 16, 1936; lowest measured, 22.02 ft (6.71 m) below datum, Oct. 28, 1977.

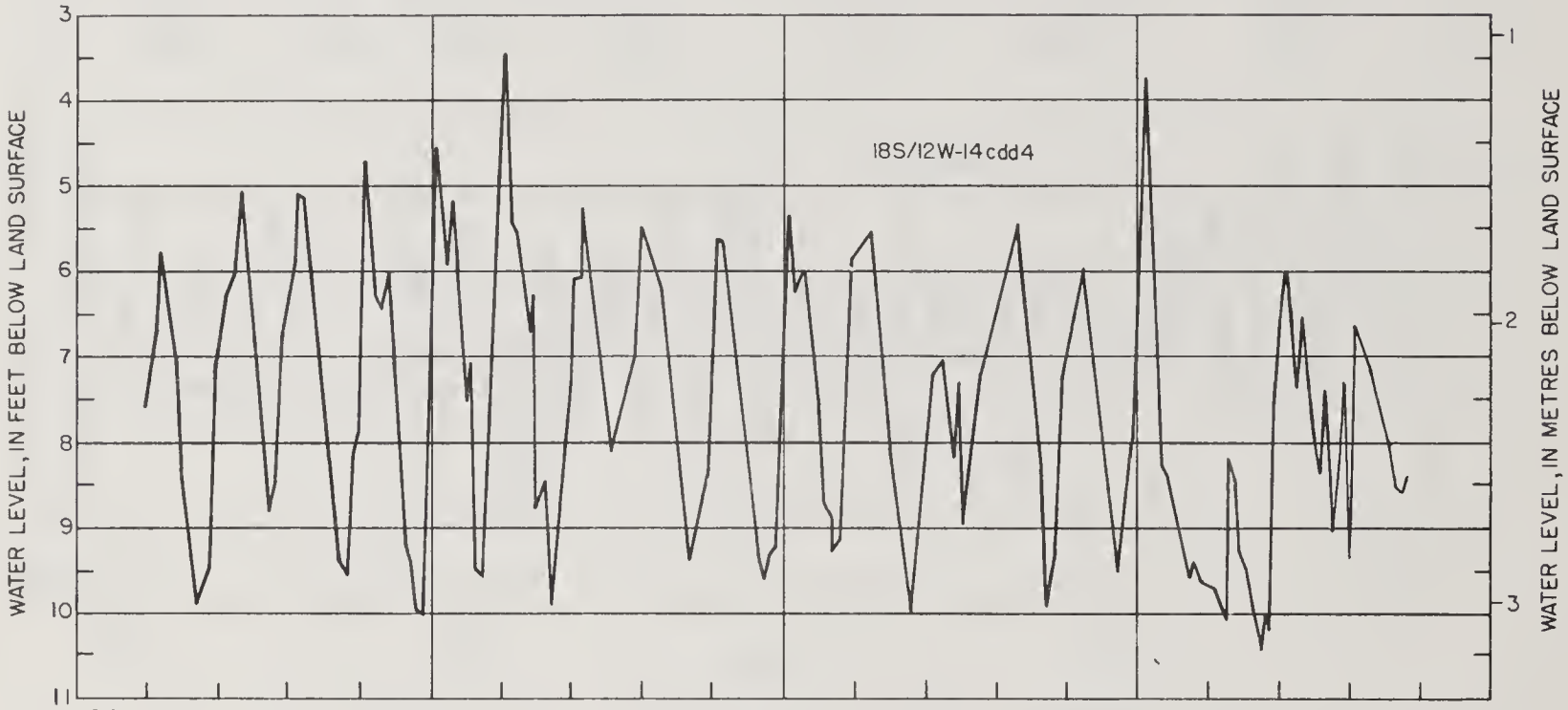
WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 11	15.56	-	-	-	-	-	-



LANE COUNTY--Continued

440000124054004. Local number 18S/12W-14CDD4.
LOCATION.--Lat 44°00'01", long 124°05'40", Hydrologic Unit 17100206.
Owner: U.S. Geological Survey.
AQUIFER.--Sand.
WELL CHARACTERISTICS.--Drilled observation well, diam 6 in (150 mm), depth 59 ft (18 m), cased to 59 ft (18 m), screened 44-59 ft (13-18 m).
DATUM.--Altitude of land surface datum is 70 ft (21 m). Measuring point: Top of casing at datum.
REMARKS.--No measurements in 1980.
PERIOD OF RECORD.--1960 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.44 ft (1.05 m) below datum, Jan. 31, 1967; lowest measured, 10.40 ft (3.17 m) below datum, Aug. 24, 1977.



LINN COUNTY

442140123052501. Local number 14S/3W-7DCC.
LOCATION.--Lat 44°21'40", long 123°05'25", Hydrologic Unit 17090003.
Owner: H.H. Kirk
AQUIFER.--Gravel.
WELL CHARACTERISTICS.--Drilled irrigation well, diam 8 in (200 m), depth 123 ft (37 m), cased to 110 ft (34 m), perforated 35-110 ft (11-34 m).
DATUM.--Altitude of land surface datum is 288 ft (88 m). Measuring point: Top of casing, 0.55 ft (0.17 m) above datum.
PERIOD OF RECORD.--1962 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.20 ft (0.67 m) below datum, Mar. 21, 1980; lowest measured, 13.30 ft (4.05 m) below datum, Oct. 11, 1966.

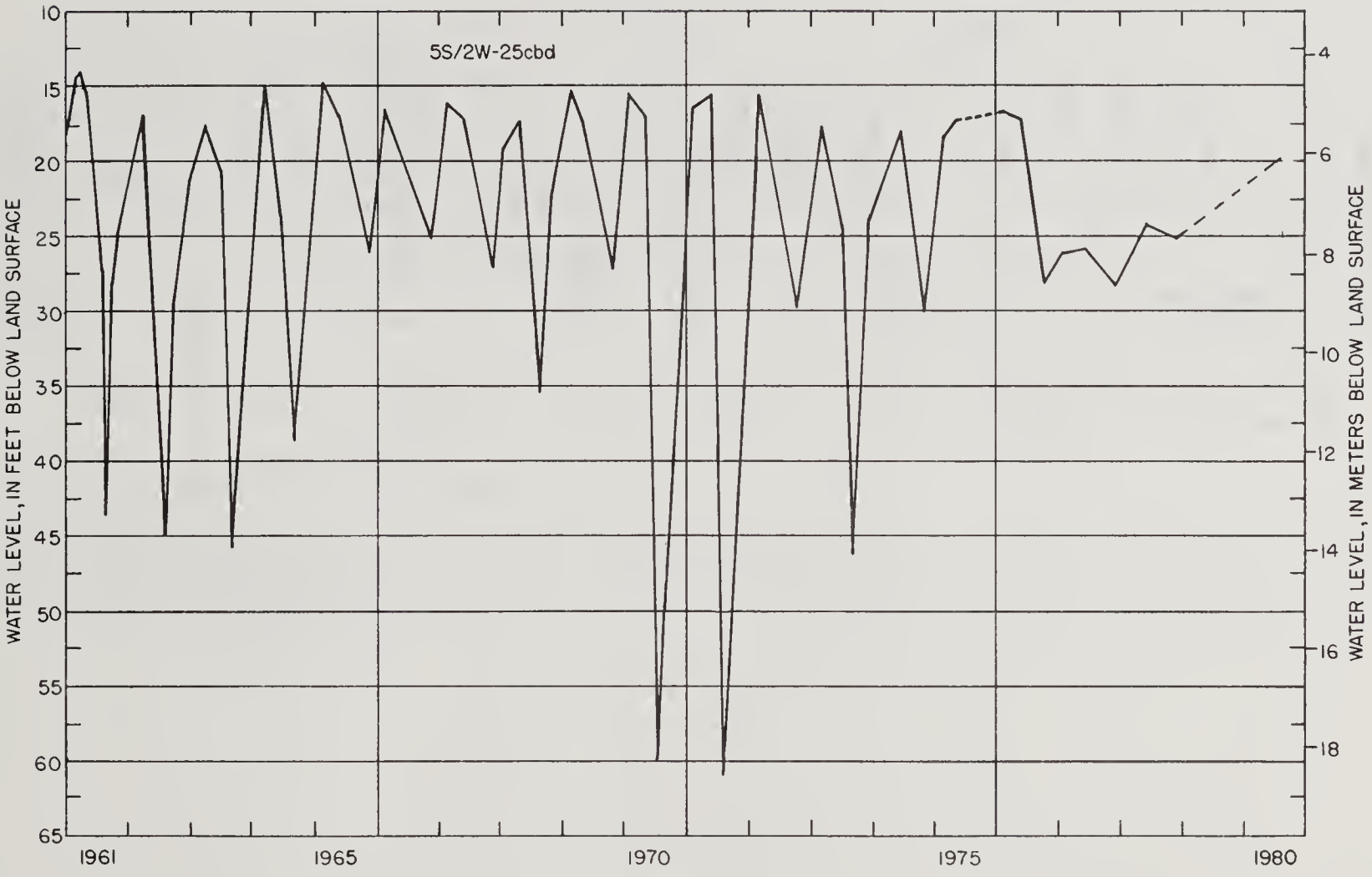
WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	9.27	JAN 23	2.45	APR 24	2.47	JUL 21	6.98
NOV 20	5.10	FEB 22	2.48	MAY 16	4.05	AUG 20	9.04
DEC 20	2.47	MAR 21	2.20	JUN 26	5.98	SEP 22	9.57

MARION COUNTY

450620122530501. Local number 5S/2W-25CBD.
LOCATION.--Lat 45°06'20", long 122°52'58", Hydrologic Unit 17090009.
Owner: Agricultural Research Corp. (Sam H. Brown).
AQUIFER.--Sand and gravel.
WELL CHARACTERISTICS.--Drilled irrigation well, diam 18 to 6 in (460 to 150 mm), depth 252 ft (77 m), casing perforated 117-147 ft (36-45 m), 215-245 ft (65-75 m).
DATUM.--Land surface datum is 180.31 ft (54.96 m) National Geodetic Vertical Datum of 1929. Measuring point: Top edge of seal around pump column, 0.65 ft (0.20 m) below datum.
REMARKS.--No measurements in 1980.
PERIOD OF RECORD.--1929-30, 1935-36, 1938 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.74 ft (4.19 m) below datum, Mar. 11, 1948; lowest measured, b/ 61.03 ft (18.60 m) below datum, Aug. 3, 1971.

b May be affected by recent pumping.

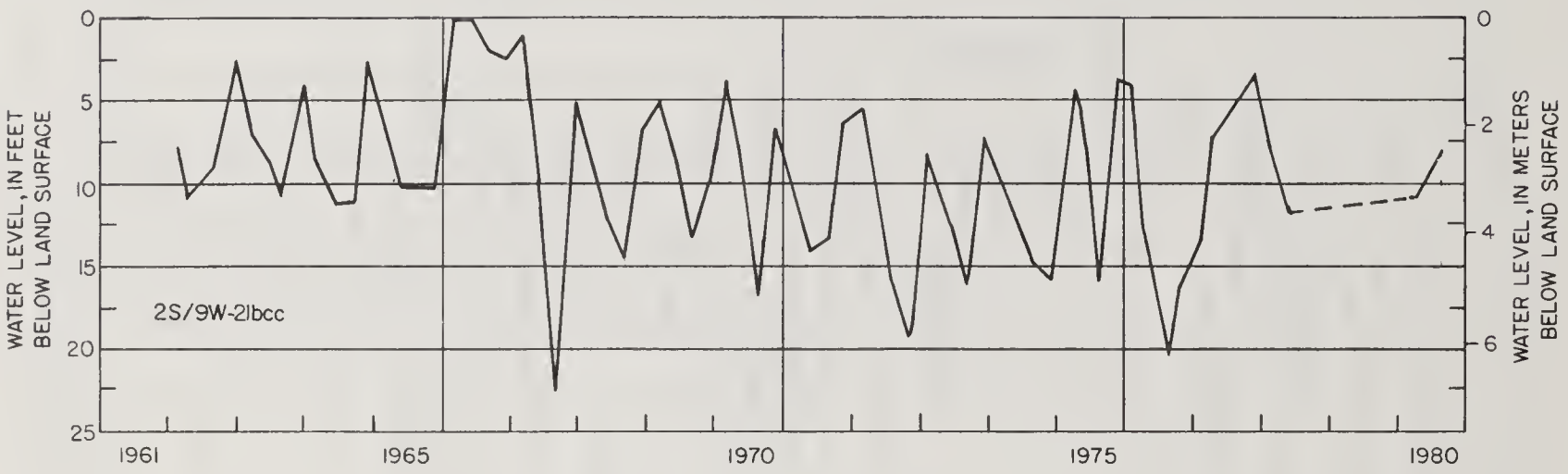


TILLAMOOK COUNTY

452300123481501. Local number 2S/9W-21BCC.
LOCATION.--Lat 45°23'03", long 123°48'08", Hydrologic Unit 17100203.
Owner: Vern Darby.
AQUIFER.--Gravel.
WELL CHARACTERISTICS.--Drilled domestic well, diam 6 in (150 mm), depth 128 ft (39 m).
DATUM.--Altitude of land surface datum is about 120 ft (37 m). Measuring point: Top of casing, at datum.
PERIOD OF RECORD.--1962 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, flowing, Feb. 21, 1966; lowest measured, 22.89 ft (6.98 m) below datum, Aug. 2, 1967.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 8	10.63	-	-	-	-	-	-



453514122575801. Local number 1N/2W-8BCA.
LOCATION.--Lat 45°35'14", long 122°57'58", Hydrologic Unit 17090010.
Owner: Van Raden Farms.
AQUIFER.--Valley fill.
WELL CHARACTERISTICS.--Drilled domestic well, diam 6 in (150 mm), reported depth 60 ft (18 m), cased to 60 ft (18 m), perforated 28-60 ft (9-18 m).
DATUM.--Altitude of land surface datum is 200 ft (61 m). Measuring point: Top of casing, 0.40 ft (0.12 m) above datum.
PERIOD OF RECORD.--1951 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.30 ft (0.01 m) above datum, Dec. 20, 1955; lowest measured, 26.91 ft (8.20 m) below datum, July 15, 1954.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 16	4.10	-	-	-	-	-	-

453117122593402. Local number 1N/3W-36DDC.
LOCATION.--Lat 45°31'17", long 122°59'34", Hydrologic Unit 17090010.
Owner: Terminal Ice. Co.
AQUIFER.--Sand and gravel.
WELL CHARACTERISTICS.--Drilled unused well, diam 12 in (300 mm), reported depth 171 ft (52 m).
DATUM.--Altitude of land surface datum is 180 ft (55 m). Measuring point: Top of casing, at datum.
PERIOD OF RECORD.--1951 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.02 ft (2.14 m) below datum, Jan. 28, 1970; lowest measured, 22.16 ft (6.75 m) below datum, Sept. 22, 1951.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 16	16.60	-	-	-	-	-	-

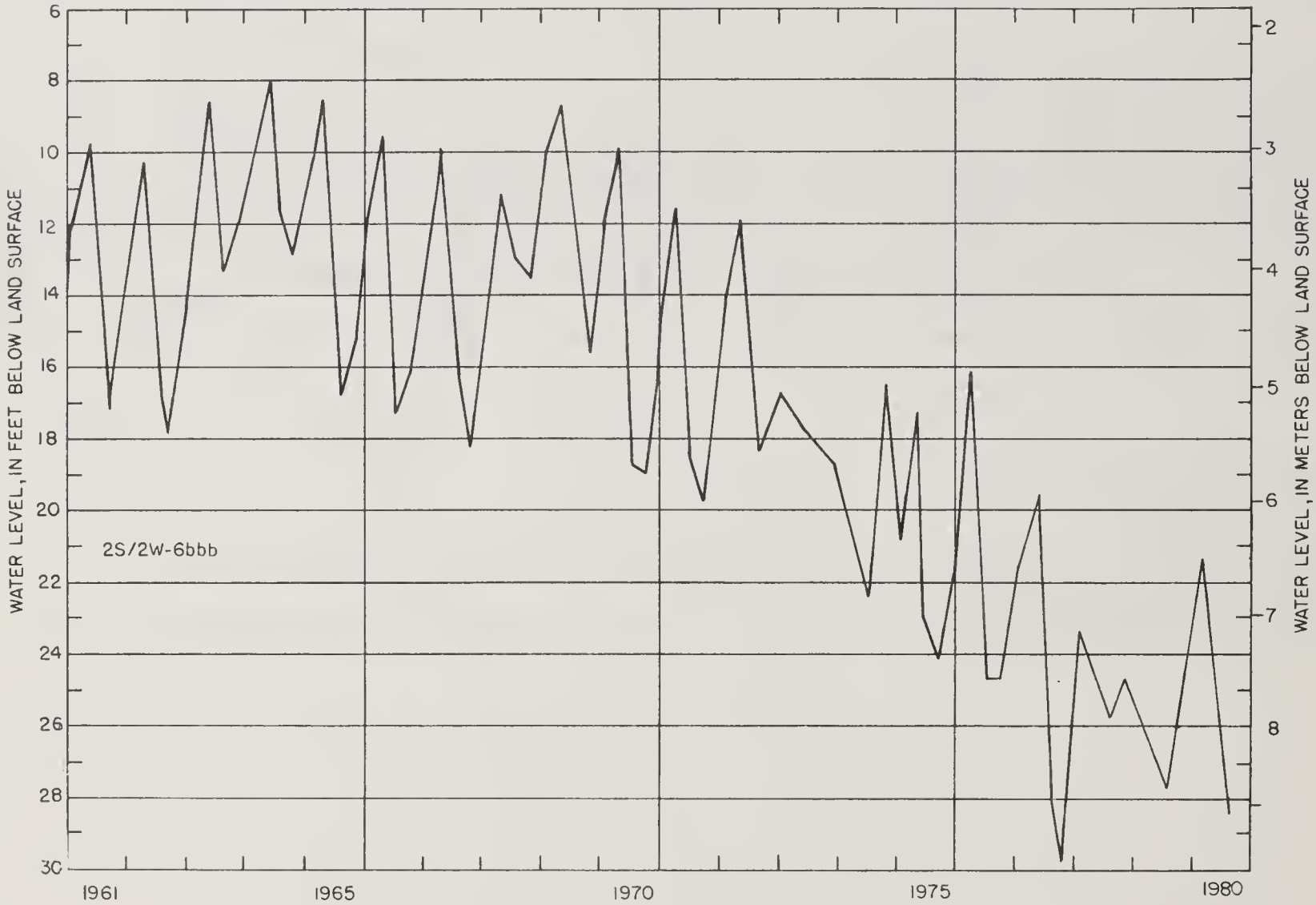
453050123081001. Local number 1S/4W-2ADC.
LOCATION.--Lat 45°30'50", long 123°08'10", Hydrologic Unit 17090010.
Owner: Myron Sheelar.
AQUIFER.--Alluvium.
WELL CHARACTERISTICS.--Drilled irrigation well, diam 6 in (150 mm), depth 85 ft (26 m).
DATUM.--Altitude of land surface datum is 170 ft (52 m). Measuring point: Top of casing, 0.80 ft (0.24 m) above datum.
REMARKS.--No measurements in 1980.
PERIOD OF RECORD.--1951 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.81 ft (2.38 m) below datum, Jan. 13, 1959; lowest measured, 16.94 ft (5.16 m) below datum, Nov. 2, 1965.

WASHINGTON COUNTY--Continued

452600122592201. Local number 2S/2W-6BBB.
LOCATION.--Lat 45°25'58", long 122°59'20", Hydrologic Unit 17090010.
Owner: S.R. Rotchstrom.
AQUIFER.--Columbia River Basalt Group.
WELL CHARACTERISTICS.--Drilled irrigation well, diam 6 in (150 mm), reported depth 486 ft (148 m), cased to 250 ft (76 m).
DATUM.--Altitude of land surface datum is 190 ft (58 m). Measuring point: Hole in south side of pumpbase, 0.60 ft (0.18 m) above datum.
PERIOD OF RECORD.--1951 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.66 ft (1.42 m) below datum, Mar. 16, 1951; lowest measured, 29.85 ft (9.10 m) below datum, Oct. 12, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 11	21.30	-	-	-	-	-	-



YAMHILL COUNTY

450829123143801. Local number 5S/5W-13ABC.
LOCATION.--Lat 45°08'29", long 123°14'38", Hydrologic Unit 17090008.
Owner: George Fuller.
AQUIFER.--Sand and gravel.
WELL CHARACTERISTICS.--Drilled domestic and stock well, diam 7 in (180 mm), depth 64 ft (20 m).
DATUM.--Land surface datum is 151.09 ft (46.05 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 0.50 ft (0.15 m) above datum.
REMARKS.--No measurements in 1980.
PERIOD OF RECORD.--1928-30, 1935-36, 1938 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.25 ft (2.52 m) below datum, Apr. 1, 1963; lowest measured, 28.67 ft (8.74 m) below datum, July 8, 1977.

	PAGE
ACCURACY OF DATA	23
ALDER BROOK NEAR ROSE LODGE	469
ALGAE, DEFINITION OF	8
ALSEA RIVER, NEAR TIDEWATER	306-311
NORTH FORK, AT ALSEA	304
AMAZON CREEK NEAR EUGENE	186
APPLEGATE RIVER, NEAR APPLEGATE	442-444
MIDDLE FORK, NEAR COPPER	427-430
NEAR COPPER	439-441
NEAR WILDERVILLE	445-447
ASHLAND CREEK, EAST FORK, NEAR ASHLAND	419
WEST FORK, NEAR ASHLAND	418
BACTERIA, DEFINITION OF	8
BEAR CREEK (ROGUE RIVER BASIN) AT MEDFORD	420
BEAR CREEK (SANDY RIVER BASIN) NEAR BULL RUN	78-80,469
BIG BUTTE CREEK, NEAR MCLEOD	396-398
SOUTH FORK, NEAR BUTTE FALLS	395
BIG CREEK NEAR ROOSEVELT BEACH	312
BIG ROCK CREEK NEAR VALSETZ	298,299
BLAZED ALDER CREEK NEAR RHODODENDRON	48
BLUE RIVER, AT BLUE RIVER	170-172
BELOW TIDBITS CREEK, NEAR BLUE RIVER	163-165
BLUE RIVER LAKE NEAR BLUE RIVER	169
BREITENBUSH RIVER ABOVE CANYON CREEK, NEAR DETROIT	202-204
BUCK CREEK TRIBUTARY NEAR SCOTTSBURG	470
BUDWORM CREEK NEAR BELKNAP SPRINGS	151
BULL RUN RESERVOIR NUMBER ONE NEAR BULL RUN	81
BULL RUN RESERVOIR NUMBER TWO NEAR BULL RUN	96
BULL RUN RIVER, NEAR BULL RUN	97
NEAR MULTNOMAH FALLS	49-55
NORTH FORK, NEAR MULTNOMAH FALLS	63-71
SOUTH FORK, NEAR BULL RUN	89-95
BULL RUN RIVER BASIN, DISCHARGE MEASUREMENTS AT MISCELLANEOUS SITES IN	471
BUTTE CREEK AT MONITOR	244
CALAPOOIA RIVER, AT ALBANY	194-196
AT HOLLEY	191-193
CALAPOOYA CREEK AT NONPAREIL	352
CAMP CREEK NEAR BULL RUN	85-87,469
CARBERRY CREEK NEAR COPPER	436-438
CEDAR CREEK NEAR BRIGHTWOOD	88
CHETCO RIVER NEAR BROOKINGS	466
CLACKAMAS RIVER, ABOVE THREE LYNX CREEK	267
AT ESTACADA	268
NEAR CLACKAMAS	269
CLEARWATER RIVER ABOVE TRAP CREEK, NEAR TOKETEE FALLS	344
COLUMBIA AT BRADWOOD	283,284
AT COLUMBIA CITY	277,278
AT LONGVIEW, WA	467
AT MOUTH, NEAR ASTORIA	467
AT MULTNOMAH FALLS	42,43
AT RAINIER	279,280
AT SAINT HELENS	467
AT VANCOUVER, WA	467
AT WARRENDALE	35-41
AT WASHOUGAL, WA	44,45
AT WAUNA	281,282
COOPERATION	2
COOS RIVER BASIN, DISCHARGE MEASUREMENTS AT MISCELLANEOUS SITES IN	472
COQUILLE RIVER, NORTH FORK, NEAR FAIRVIEW	371
SOUTH FORK, AT POWERS	370
COTTAGE GROVE LAKE NEAR COTTAGE GROVE	137
COUGAR CREEK NEAR BULL RUN	75-77,469
COUGAR LAKE NEAR RAINBOW	159
COW CREEK, NEAR AZALEA	328
NEAR RIDDLE	330
WEST FORK, NEAR GLENDALE	329
COYOTE CREEK NEAR CROW	183
DEAN CREEK NEAR REEDSPORT	363
DEER CREEK NEAR BULL RUN	72-74,469
DEFINITION OF TERMS AND ABBREVIATIONS	8
DETROIT LAKE NEAR DETROIT	205
DISCHARGE AT UNGAGED SITES	467
DORENA LAKE NEAR COTTAGE GROVE	140
DOWNSTREAM ORDER AND STATION NUMBERS	18
DRAINAGE AREA, DEFINITION OF	10
DRAINAGE BASIN, DEFINITION OF	11
DRY RUN CREEK NEAR PORT ORFORD	470
EAST HUMBUG CREEK NEAR DETROIT	201
EAST LATERAL NEAR ASHLAND	417
ELK CREEK (ROGUE RIVER BASIN) NEAR CASCADE GORGE	402-404
WEST BRANCH, NEAR TRAIL	405-407
NEAR TRAIL	408-410
ELK CREEK (UMPQUA RIVER BASIN) NEAR DREW	324
NEAR ELKTON	359
ELLIOT CREEK NEAR COPPER	431-435
EMIGRANT CREEK NEAR ASHLAND	417
EMIGRANT LAKE NEAR ASHLAND	417
EXPLANATION OF GROUND-WATER LEVEL RECORDS	27
EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS	18
EXPLANATION OF WATER-QUALITY RECORDS	24
FALL CREEK (CLATSKANIE RIVER BASIN) NEAR CLATSKANIE	469
FALL CREEK (WILLAMETTE RIVER BASIN) BELOW WINBERRY CREEK, NEAR FALL CREEK	128-130
NEAR LOWELL	121-123
FALL CREEK LAKE NEAR LOWELL	127
FERN RIDGE LAKE NEAR ELMIRA	184
FIR CREEK NEAR BRIGHTWOOD	56-62
FISH CREEK, AT BIG CAMAS RANGER STATION, NEAR TOKETEE FALLS	345
FISH LAKE NEAR LAKECREEK	415
FIVEMILE CREEK NEAR BULL RUN	82-84,469
FIVE RIVERS NEAR FISHER	305
FOSTER LAKE AT FOSTER	221
GALES CREEK NEAR FOREST GROVE	252
GATE CREEK AT VIDA	177
GRAVE CREEK AT PEASE BRIDGE, NEAR PLACER	450
GRAY CREEK NEAR OAKRIDGE	110
GREEN PETER LAKE NEAR FOSTER	220
GROUND-WATER LEVELS IN:	
CLACKAMAS COUNTY	481
CLATSOP COUNTY	481
COOS COUNTY	481
CURRY COUNTY	482
DOUGLAS COUNTY	482
JACKSON COUNTY	483
LANE COUNTY	483,484
LINN COUNTY	484
MARION COUNTY	485
TILLAMOOK COUNTY	486
WASHINGTON COUNTY	487,488
YAMHILL COUNTY	488
HASKINS CREEK BELOW RESERVOIR, NEAR MCMINNVILLE	242
HASKINS CREEK RESERVOIR NEAR MCMINNVILLE	241
HENRY HAGG LAKE NEAR GASTON	249
HILLS CREEK ABOVE HILLS CREEK LAKE, NEAR OAKRIDGE	102-104
HILLS CREEK LAKE NEAR OAKRIDGE	105
HYDROLOGIC BENCH-MARK STATION	16

	PAGE
HYDROLOGIC CONDITIONS	3
HYDROLOGIC UNIT, DEFINITION OF	11
ILLINOIS RIVER, EAST FORK, NEAR TAKILMA	460
WEST FORK, BELOW ROCK CREEK, NEAR O'BRIEN	462,463
NEAR KERBY	464
NEAR AGNESS	465
INTRODUCTION	1
JACKSON CREEK NEAR TILLER	322
JOHNSON CREEK AT SYCAMORE	270
KINNEY CREEK NEAR MCKEE BRIDGE	470
LAKE CREEK (SIUSLAW RIVER BASIN) NEAR DEADWOOD	313
LAKE CREEK (UMPQUA RIVER BASIN) NEAR DIAMOND LAKE	341
LAKES AND RESERVOIRS:	
BLUE RIVER LAKE NEAR BLUE RIVER	169
BULL RUN RESERVOIR NUMBER ONE NEAR BULL RUN	81
BULL RUN RESERVOIR NUMBER TWO NEAR BULL RUN	96
COTTAGE GROVE LAKE NEAR COTTAGE GROVE	137
COUGAR LAKE NEAR RAINBOW	159
DETROIT LAKE NEAR DETROIT	205
DORENA LAKE NEAR COTTAGE GROVE	140
EMIGRANT LAKE NEAR ASHLAND	417
FALL CREEK LAKE NEAR LOWELL	127
FERN RIDGE LAKE NEAR ELMIRA	184
FISH LAKE NEAR LAKECREEK	415
FOSTER LAKE AT FOSTER	221
GREEN PETER LAKE NEAR FOSTER	220
HASKINS CREEK RESERVOIR NEAR MCMINNVILLE	241
HENRY HAGG LAKE NEAR GASTON	249
HILLS CREEK LAKE NEAR OAKRIDGE	105
LEMOLO LAKE NEAR TOKETEE FALLS	342
LOOKOUT POINT LAKE NEAR LOWELL	117
LOST CREEK LAKE NEAR MCLEOD	387
LOWER PONY CREEK RESERVOIR AT COOS BAY	368
MCGUIRE LAKE NEAR FAIRDALE	293
SMITH RIVER RESERVOIR NEAR BELKNAP SPRINGS	146
TIMOTHY LAKE NEAR GOVERNMENT CAMP	264
UPPER PONY CREEK RESERVOIR NEAR COOS BAY	368
WALDO LAKE NEAR OAKRIDGE	111
LEMOLO LAKE NEAR TOKETTE FALLS	342
LITTLE BUTTE CREEK, NORTH FORK, AT FISH LAKE, NEAR LAKECREEK	415
NORTH FORK, NEAR LAKECREEK	416
SOUTH FORK, NEAR LAKECREEK	414
LITTLE CREEK NEAR KNAPPA	469
LITTLE NORTH SANTIAM RIVER NEAR MEHAMA	209
LITTLE RIVER AT PEEL	348
LITTLE SANDY RIVER NEAR BULL RUN	98
LONG TOM RIVER, AT MONROE	187
NEAR ALVADORE	185
NEAR NOTI	182
LOOKINGGLASS CREEK AT BROCKWAY	332
LOOKOUT CREEK NEAR BLUE RIVER	166-168
LOOKOUT POINT LAKE NEAR LOWELL	117
LOST CREEK LAKE NEAR MCLEOD	387
LOWER PONY CREEK RESERVOIR AT COOS BAY	368
LUCKIAMUTE RIVER NEAR SUVER	233
MARYS RIVER NEAR PHILOMATH	188
MCGUIRE LAKE NEAR FAIRDALE	293
MCKENZIE RIVER, AT MCKENZIE BRIDGE	152-155
AT OUTLET OF CLEAR LAKE	144
BELOW TRAIL BRIDGE DAM, NEAR BELKNAP SPRINGS	147-150
MCKENZIE RIVER NEAR VIDA	173-176
SOUTH FORK, ABOVE COUGAR LAKE, NEAR RAINBOW	156-158
NEAR RAINBOW	160-162
MIDDLE SANTIAM RIVER NEAR CASCADIA	214-216
MILL CREEK NEAR SCOTTSBURG	362
MILLICOMA RIVER, WEST FORK, NEAR ALLEGANY	367
MISCELLANEOUS SITES, WATER-QUALITY ANALYSES OF	473,474
MOHAWK RIVER NEAR SPRINGFIELD	178
MOLALLA RIVER, ABOVE PINE CREEK, NEAR WILHOIT	243
MOSBY CREEK AT MOUTH, NEAR COTTAGE GROVE	142
NATIONAL STREAM-QUALITY ACCOUNTING NETWORK	16
NEHALEM RIVER NEAR FOSS	285-291
NESTUCCA RIVER, NEAR BEAVER	295-297
NEAR FAIRDALE	294
NORTH MYRTLE CREEK NEAR MYRTLE CREEK	331
NORTH SANTIAM RIVER, AT MEHAMA	210
AT NIAGARA	206-208
BELOW BOULDER CREEK, NEAR DETROIT	198-200
NORTH UMPQUA RIVER, ABOVE COPELAND CREEK, NEAR TOKETEE FALLS	346
AT WINCHESTER	349-351
BELOW LEMOLO LAKE, NEAR TOKETEE FALLS	343
NORTH YAMHILL RIVER NEAR FAIRDALE	240
OAK GROVE FORK, ABOVE POWERPLANT INTAKE	266
NEAR GOVERNMENT CAMP	265
OSWEGO CANAL NEAR LAKE OSWEGO	253
OTHER DATA AVAILABLE	23
PARADISE CREEK NEAR ELKTON	360
PARROTT CREEK AT ROSEBURG	470
PONY CREEK AT COOS BAY	368,369
POOP CREEK NEAR BIG BOTTOM	469
PRECIPITATION SAMPLES, WATER-QUALITY ANALYSES OF	475-479
QUARTZVILLE CREEK NEAR CASCADIA	217-219
RECORDS OF DISCHARGE COLLECTED BY AGENCIES OTHER THAN THE GEOLOGICAL SURVEY	24
RED BLANKET CREEK NEAR PROSPECT	382
ROGUE RIVER, ABOVE PROSPECT	372
AT DODGE BRIDGE, NEAR EAGLE POINT	411-413
AT GRANTS PASS	424-426
AT MARIAL	451,452
AT MCLEOD	388-394
AT RAYGOLD, NEAR CENTRAL POINT	421-423
BELOW PROSPECT	373-380
NEAR AGNESS	453-459
NEAR MCLEOD	399-401
NEAR MERLIN	448,449
SOUTH FORK, NEAR PROSPECT	381
SOUTH OF PROSPECT	383-386
TRIBUTARY NEAR TRAIL	470
ROGUE RIVER BASIN, DISCHARGE MEASUREMENTS AT MISCELLANEOUS SITES IN	472
ROW RIVER, ABOVE PITCHER CREEK, NEAR DORENA	139
NEAR COTTAGE GROVE	141
SALMON CREEK NEAR OAKRIDGE	109
SALMON RIVER NEAR GOVERNMENT CAMP	46
SANDY RIVER NEAR MARMOT	47
SANTIAM RIVER AT JEFFERSON	230-232

	PAGE
SCOGGINS CREEK BELOW HENRY HAGG LAKE, NEAR GASTON	250
SCHOLFIELD CREEK NEAR REEDSPORT	364
SEDIMENT	26
SILETZ RIVER AT SILETZ	300-302
SIUSLAW RIVER NEAR MAPLETON	314-320
NORTH FORK, NEAR MINERVA	321
SMITH RIVER (UMPQUA RIVER BASIN) NEAR GARDINER	365
NORTH FORK, NEAR GARDINER	366
SMITH RIVER (WILLAMETTE RIVER BASIN) ABOVE SMITH RIVER RESERVOIR, NEAR BELKNAP SPRINGS	145
RESERVOIR NEAR BELKNAP SPRINGS	146
SOLUTES	26
SOUTH SANTIAM RIVER, AT WATERLOO	226-228
BELOW CASCADIA	211-213
NEAR FOSTER	223-225
SOUTH UMPQUA RIVER, AT DAYS CREEK	325-327
AT TILLER	323
NEAR BROCKWAY	333
NEAR ROSEBURG	334-340
SOUTH YAMHILL RIVER, NEAR WHITESON	239
NEAR WILLAMINA	237
TRIBUTARY NEAR WILLAMINA	469
SPECIAL NETWORKS AND PROGRAMS	16
STEAMBOAT CREEK NEAR GLIDE	347
SUCKER CREEK BELOW LITTLE GRAYBACK CREEK, NEAR HOLLAND	461
TEMPERATURE	26
THOMAS CREEK NEAR SCIO	229
TIMOTHY LAKE NEAR GOVERNMENT CAMP	264
TUALATIN RIVER, AT WEST LINN	254-260
NEAR DILLEY	251
NEAR GASTON	245-248
UMPQUA RIVER NEAR ELKTON	353-358
UPPER PONY CREEK RESERVOIR NEAR COOS BAY	368
WALDO LAKE NEAR OAKRIDGE	111
WALDO LAKE OUTLET NEAR OAKRIDGE	112
WEATHERLY CREEK NEAR SCOTTSBURG	361
WILEY CREEK AT FOSTER	222
WILLAMETTE RIVER, ABOVE CALAPOOIA RIVER, AT ALBANY	189,190
ABOVE FALLS, AT OREGON CITY	261
AT ALBANY	197
AT HARRISBURG	179-181
AT PORTLAND	271-276
AT SALEM	234-236
BELOW FALLS, AT OREGON CITY	262,263
COAST FORK, AT LONDON	134-136
BELOW COTTAGE GROVE DAM	138
NEAR GOSHEN	143
MIDDLE FORK, ABOVE SALT CREEK, NEAR OAKRIDGE	106-108
AT JASPER	131-133
BELOW NORTH FORK, NEAR OAKRIDGE	114-116
NEAR DEXTER	118-120
NEAR OAKRIDGE	99-101
NORTH FORK OF, NEAR OAKRIDGE	113
TRIBUTARY NEAR OAKRIDGE	469
DISCHARGE MEASUREMENTS AT MISCELLANEOUS SITES IN	471,472
WILLAMINA CREEK NEAR WILLAMINA	238
WILSON RIVER NEAR TILLAMOOK	292
WINBERRY CREEK NEAR LOWELL	124-126
YAQUINA RIVER NEAR CHITWOOD	303

FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	2.54×10^{1}	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^{0}	kilometers (km)
	Area	
acres	4.047×10^{3}	square meters (m^2)
	4.047×10^{-1}	square hectometers (hm^2)
	4.047×10^{-3}	square kilometers (km^2)
square miles (mi^2)	2.590×10^{0}	square kilometers (km^2)
	Volume	
gallons (gal)	3.785×10^{0}	liters (L)
	3.785×10^{0}	cubic decimeters (dm^3)
	3.785×10^{-3}	cubic meters (m^3)
million gallons	3.785×10^{3}	cubic meters (m^3)
	3.785×10^{-3}	cubic hectometers (hm^3)
cubic feet (ft^3)	2.832×10^{1}	cubic decimeters (dm^3)
	2.832×10^{-2}	cubic meters (m^3)
cfs-days	2.447×10^{3}	cubic meters (m^3)
	2.447×10^{-3}	cubic hectometers (hm^3)
acre-feet (acre-ft)	1.233×10^{3}	cubic meters (m^3)
	1.233×10^{-3}	cubic hectometers (hm^3)
	1.233×10^{-6}	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	2.832×10^{1}	liters per second (L/s)
	2.832×10^{1}	cubic decimeters per second (dm^3/s)
	2.832×10^{-2}	cubic meters per second (m^3/s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm^3/s)
	6.309×10^{-5}	cubic meters per second (m^3/s)
million gallons per day	4.381×10^{1}	cubic decimeters per second (dm^3/s)
	4.381×10^{-2}	cubic meters per second (m^3/s)
	Mass	
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons

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